Notebook, N-08-12-22.1

December 22, 1908.

A4 CELL #398.

Contains –

#731 $Ni(OH)_2$
1a+2a Ni Flake
962 Fe Mix

Cell received dry.
Filled with 1330 cc of 21 % KOH containing 45 g. of $LiOH$ per liter and added 60 g. of dry $LiOH$.
Allowed plates to soak in the electrolyte 22 hours before putting cell on charge.

A4 #398

DATE	TIME	MIN.	AMPS	VOLTS 398	VOLTS Fe	VOLTS Ni	REMARKS.
				Charge # 1.			
12/22/08	P.M. 1.45	0	15	.55	.49	.065	NiO₂ Test Electrode
	.47	2	"	.585	.48	.10	
	.50	5	"	.59	.479	.105	
	.55	10	"	.593	.479	.11	
	2.05	20	"	.60	.479	.113	
	.15	30	"	.605	.48	.119	
	.26	41	"	.627	.50	.122	
	.35	50	"	.663	.535	.123	
	.40	55	"	.702	.572	.125	
	.45	60	"	.76	.627	.127	
	.50	65	"	.877	.74	.132	
	.55	70	"	1.08	.94	.137	
	3.00	75	"	1.38	1.238	.137	
	.05	80	"	1.50	1.36	.127	
	.10	85	"	1.56	1.419	.132	
	.15	90	"	1.616	1.472	.126	
	.25	100	"	1.622	1.482	.125	
	.35	110	"	1.622	1.482	.125	
	.45	120	"	1.623	1.481	.127	
	4.05	140	"	1.623	1.481	.135	
	.25	160	"	1.623	1.479	.136	
	.45	180	"	1.623	1.478	.138	
	5.05	200	"	1.623	1.477	.139	
	.25	220	"	1.628	1.471	.142	

DATE	TIME	MIN.	AMP	VOLTS #398	VOLTS Fe.	VOLTS Ni.
12-22-8	P.M. 5.45	240	15	1.625	1.473	.142
	6.05	260	"	1.625	1.47	.142
	.25	280	"	1.625	1.467	.143
	.45	300	"	1.627	1.467	.145
	7.05	320	"	1.632	1.465	.15
	.25	340	"	1.632	1.465	.15
	.45	360	"	1.635	1.463	.152
	8.05	380	"	1.626	1.462	.155
	.25	400	"	1.636	1.465	.153
	.45	420	"	1.637	1.466	.155
	9.05	440	"	1.636	1.465	.156
	.25	460	"	1.636	1.465	.157
	.45	480	"	1.638	1.464	.158
	10.05	500	"	1.64	1.466	.16
	.25	520	"	1.641	1.466	.161
	.45	540	"	1.642	1.467	.162
	11.05	560	"	1.644	1.47	.161
	.25	580	"	1.65	1.475	.162
	.45	600	"	1.657	1.48	.162
12/23	A.M. 12.05	620	"	1.66.2	1.48.2	.165
	.25	640	"	1.67	1.49	.165
	.45	660	"	1.67	1.49	.166
	1.05	680	"	1.675	1.495	.17
	.25	700	"	1.68.1	1.497	.17
	.45	720	"	1.69	1.50	.172

DATE	TIME	MIN.	AMP	VOLTS		
				#398	Fe.	T.L.
12/22/8	AM 2.05	740	15	169	150.5	17.5
	.25	760	"	170.1	151	17.7
	.45	780	"	171	151.5	17.5
	3.05	800	"	171	152.2	17.3
	.25	820	"	172	153	17.5
	.45	840	"	172	153	17.2
	4.05	860	"	172.5	153.5	17.5
	.25	880	"	172.3	153.2	17.3
	.45	900	"	173	154	17
	5.05	920	"	173	154.1	17.5
	.25	940	"	173	154.1	17.2
	.45	960	"	173	154.2	17.1
	6.05	980	"	173	154.2	17.2
	.25	1000	"	173.6	155	17.5
	.45	1020	"	174.4	155	17.3
	7.05	1040	"	174.5	155	17.5
	.25	1060	"	174	155.4	17.1
	.45	1080	"	174.2	155.5	17.1
	8.05	1100	"	1.742	1.555	1.71
	.25	1120	"	174.5	155.4	17.3
	.45	1140	"	1.75	1.558	.179
	9.05	1160	"	1.75	1.559	.18
	.25	11.80	"	1.75	1.559	.18
	.45	1200	"	1.75	1.559	.18
	10.45	1260		1.747	1.537	.195

DATE	TIME	MIN.	AMP	VOLTS		
				#398	Fe.	T.L.
12/23/08	AM 11.45	1370	15	1.74	1.55	.179
	PM 12.45	1380	"	1.74	1.55	.179
	1.45	1440	"	1.739	1.542	.178
	2.45	1500	"	1.734	1.54	.177
	3.45	1560	"	1.722	1.54	.177
	4.45	1620	"	1.729	1.539	.178
	5.45	1680	"	1.726	1.54	.178
	6.45	1740	"	1.723	1.538	.177
	7.45	18.00	"	1.723	1.537	.177
	8.45	1860	"	1.72	1.535	.176
	9.45	1920	"	1.72	1.534	.176
	10.45	1980	"	1.719	1.533	.176
	11.45	2040	"	171.7	153	17.1
12/24	12.45	2100	"	172	153.1	17.1
	1.45	2160	"	171.7	153	17.4
	2.45	2220	"	171.7	153	17.4
	3.45	2280	"	172.2	153.5	17.5
	4.45	2340	"	172.2	153.5	17.5
	5.45	2400	"	172.2	153.7	17.5
	6.45	2460	"	172.5	153.5	17.5
	7.45	2520	"	172.2	151.5	17.5
	8.45	2580	"	1.722	1.516	17.6
	9.45	2640	"	1.725	1.522	.179
	10.45	2700	"	1.725	1.522	.179
	11.45	2760	"	1.725	1.521	.18

DATE	TIME	MIN.	AMP	VOLTS #398	Fe.	Th
	PM					
12/24/08	12.45	2820	15	1.727	1.53	.185
	1.45	2880	"	1.727	1.536	.181
			Discharge #1			
	P.M.					
12/24	1.48	—	open	1.577	1.423	.139
	50	0	30	1.48	1.37	.08
	52	2	"	1.383	1.325	.046
	55	5	"	1.362	1.322	.032
	2.00	10	"	1.345	1.32	.017
	10	20	"	1.322	1.32	-.003
	20	30	"	1.30	1.319	-.023
	30	40	"	1.28	1.316	-.04
	.50	60	"	1.252	1.309	-.062
	3.10	80	"	1.223	1.305	-.091
	.30	100	"	1.203	1.302	-.102
	.50	120	"	1.192	1.30	-.12
	4.10	140	"	1.177	1.30	-.135
	.30	160	"	1.162	1.30	-.142
	.50	180	"	1.152	1.297	-.147
	5.10	200	"	1.147	1.296	-.152
	.30	220	"	1.14	1.294	-.161
	.50	240	"	1.132	1.293	-.165
	6.10	260	"	1.122	1.293	-.175
	.30	280	"	1.117	1.29	-.18
	.50	300	"	1.106	1.285	.183

DATE	TIME	MIN.	AMP	VOLTS #398	Fe.1	Th.	
	PM						
12-24-8	7.10	320	30	110	1.285	-.192	
	.30	340	"	1095	128	-.20	
	.50	360	"	1082	1.282	-.205	
	8.10	380	"	1.067	1.282	-.22	
	.30	400	"	1.042	1.281	-.242	
	.50	420	"	1.025	1.279	-.26	
	9.00	430	"	1.007	1.279	-.277	
	.03	433	"	1.00	1.279	-.285	-216.5
	.10	440	"	98	1.28	-.309	
	.20	450	"	905	1.287	.392	
	.25	455	"	762	1.292	.552	
	.28½	458½	"	.50	1.297	.805	-229.2

Stood 74 hours over Christmas, Saturday, and Sunday.

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP 398	TEMP Idle
12/27/8			Charge #2			
	PM 11.20	0	30	on	charge	
	.50	20	"		71.5	67.5
12/28	AM 1.50	150	"		80	68.2
	3.50	270	"		85.5	70.5
	5.50	390	"		78	71.5
	7.50	510	"		88	71.7
	9.20	600	"		88 (82.2)	72

Put cell in cooling-can and continued charge at lower temperature as follows:

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP 398	TEMP Idle
12/28	AM 9.50	0	30		68.5	72.
	10.50	60	"		66	72.
	11.50	120	"		59.5	73.5
	12.50	180	"		58	74.5
	1.50	240	"		61	75.5
	2.50	300	"		64.5	77.5
	3.50	360	"		65	78
	4.50	420	"		66	78
	5.50	480	"	192.5	62	77.2
					(63.4)	

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP 398	TEMP Idle	
			Discharge #2				
12-29-8	P.M. 5.52	—	open	1.632			In air.
	.55	0	60	1.42			
	.57	2	"	1.265			
	6.00	5	"	1.20			
	.05	10	"	1.17			
	.15	20	"	1.145			
	.25	30	"	1.122			
	.35	40	"	1.10	73	77.2	
	.45	50	"	1.085			
	.55	60	"	1.072			
	7.05	70	"	1.062			
	.15	80	"	1.057	82	77	
	.25	90	"	1.042			
	.35	100	"	1.032			
	.45	110	"	1.02			
	.55	120	"	1.007	98.5	77	
	8.00	125	"	1.00			-125
	.05	130	"	.98			
	.15	140	"	.965			
	.25	150	"	.945			
	.35	160	"	.922	1.065	76	
	.45	170	"	.902			
	.55	180	"	.862			
	9.05	190	"	.84			

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP		
12-28-8	PM. 9.15	200	60	.76	117	76	
	.20	205	"	.547			
	.21	206	"	.50			-206
				Set stand 3 hrs.			
				Charge 3			
12/29	AM 12.25	0	30		89	75.5	
	2.25	120	"		89.5	74.2	
	4.25	240	"		89	74.5	
	6.25	360	"		89	74.7	
	8.25	480	"		91	74.	
	10.25	600	"		925 (.90)	74	
				Put cell in cooling can and continued charge at lower temperature as follows			
	AM 10.55	0	30		70	74.	
	11.55	60	"		64.2	73.7	
	12.55	120	"		63.2	74.2	
	1.55	190	"		63	74.7	
	2.55	240	"		64.5	75	
	3.55	300	"		62	75.5	
	4.55	360	"		60.5	77	
	5.55	420	"		61	77	
	6.55	480	"	19.0	61.2	77.2	
					(63.3)		

DATE	TIME	MIN.	AMP	VOLTS 398			
				Discharge #3			
12-29-8	P.M. 6.58	—	open	1.622	61.2	77.2	dry Air.
	7.00	0	60	1.465			
	.02	2	"	128			
	.05	5	"	1.24			
	.10	10	"	1.21			
	.20	20	"	1.17			
/	.30	30	"	114			
	.40	40	"	112	80.2	77.5	
	.50	50	"	1.11			
	8.00	60	"	1.095			
	.10	70	"	1.082			
	.20	80	"	1.073	91	77.5	
	.30	90	"	1.062			
	.40	100	"	1.045			
	.50	110	"	1.035			
	9.00	120	"	1.015	101	77.7	
	.10	130	"	1.00			-130
	.20	140	"	.975			
	.30	150	"	.952			
	.40	160	"	.933	117.5	77.5	
	.50	170	"	.913			
	10.00	180	"	.885			
	.10	190	"	.845			
	.20	200	"	.78	117	77.3	

DATE	TIME	MIN.	AMP	VOLTS 398	TEMPS 398	Edie	
12-29-8	10.25	205	60	.62			
	.28	208	"	.60			-208

Set Stand 3 hours.

Charge #4

DATE	TIME	MIN.	AMP	VOLTS	TEMPS		
12-30-8	P.M. 1.30	0	30		on charge		
	2,00	30	"		90	77	
	4.00	180	"		90.5	76.5	
	6.00	270	"		89.5	76.5	
	8,00	390	"		88.7	75.5	
	10.00	510	"		89.5	74.5	
	PM 12.00	630	"		91	74	
	2.00	750	"		92	74.2	
	4,00	870	"		94	74.5	
	130	900	"	1.822	90.6		

Discharge #4

DATE	TIME	MIN.	AMP	392	Fe	Ni.
12-30-8	P.M. 4.33	—	open	1.525	1.47	.101
	.35	0	30	1.51	1.44	.055
	.37	2	"	1.422	1.394	.018
	.40	5	"	1.396	1.38	.005
	.45	10	"	1.377	1.377	-.002
	.55	20	"	1.345	1.363	-.02
	5.05	30	"	1.325	136	-.039
	.15	40	"	1.302	1352	-.05

DATE	TIME	MIN.	AMP	VOLTS 398	To NiO2 Fe	Ni.	
12-30-8	PM. 5.35	60	30	1.275	1.342	-.072	
	.55	80	"	1.247	1.338	-.09	
	6.15	100	"	1.225	1.332	-.107	
	.35	120	"	1.215	1.327	-.116	
	.55	140	"	1.197	1.32	-.125	
	7.15	160	"	1.183	1.32	-.137	
	.35	180	"	1.175	1.315	-.145	
	.55	200	"	1.162	1.313	-.155	
	8.15	220	"	1.152	1.308	-.162	
	.35	240	"	1.137	1.303	-.17	
	.55	260	"	1.123	1.30	-.18	
	9.15	280	"	1.107	1.30	-.193	
	.35	300	"	1.096	1.296	-.202	
	.55	320	"	1.077	1.285	-.215	
	10.15	340	"	1.057	1.282	-.227	
	.35	360	"	1.025	1.28	-.257	
	.45	370	"	100.7	1.28	-.277	
	.49	374	"	100	1.277	-.285	-187
	.55	380	"	77.5	1.28	-.315	
	11.05	390	"	91.7	1.29	-.382	
	.15	400	"	77	1.30	-.54	
	.19	404	"	50	1.30	-.81	-202

DATE	TIME	MIN.	AMP	VOLTS	TEMP.	
				398	398	Idle
12/31/8			Charge		#5	
	PM 11.20	0	30	on	Charge	
	.50	30	"		98	74
12/31	AM 1.50	150	"		92.5	74
	3.50	270	"		90.5	72.5
	5.50	390	"		89.5	73.7
	7.50	510	"		92	73.2
	9.50	630	"		93.7	72
	11.50	750	"		94.5	73.5
	PM 1.50	870	"		95	74
	2.20	900	"	1.84	(93.2)	
					Fe	Ni
			Discharge		#5	
12-31-8	P.M. 2.23	–	open	1.59	1.485	-.102
	.25	0	30	1.50	1.44	.062
	.27	2	"	1.425	1.40	.018
	.30	5	"	1.395	1.38	.003
	.35	10	"	1.375	1.377	-.007
	.45	20	"	1.345	1.372	-.025
	.55	30	"	1.325	1.365	-.042
	3.05	40	"	1.305	1.36	-.057
	.25	60	"	1.275	1.35	-.079
	.45	80	"	1.255	1.343	-.102
	4.05	100	"	1.233	1.337	-.112
	.25	120	"	1.215	1.335	-.122

DATE	TIME	MIN.	AMP	VOLTS	VOLTS TO NiO2		
				398	Fe	Ni	
12-31-8	P.M. 4.45	140	30	1.20	1.327	-.132	
	5.05	160	"	1.186	1.325	-.14	
	.25	180	"	1.178	1.322	-.15	
	.45	200	"	1.165	1.32	-.16	
	6.05	220	"	1.155	1.316	-.165	
	.25	240	"	1.14	1.314	-.177	
	.45	260	"	1.125	1.307	-.183	
	.55	270	"	1.12	1.305	-.187	
	7.05	280	"	1.113	1.304	-.196	
	.15	290	"	1.106	1.302	-.20	
	.25	300	"	1.10	1.30	-.203	
	.35	310	"	1.093	1.299	-.208	
	.45	320	"	1.081	1.297	-.217	
	.55	330	"	1.075	1.295	-.223	
	8.05	340	"	1.062	1.29	-.233	
	.15	350	"	1.052	1.287	-.24	
	.25	360	"	1.04	1.285	-.256	
	.30	365	"	1.029	1.284	-.26	
	.35	370	"	1.021	1.285	-.267	
	.40	375	"	1.007	1.285	-.282	
	.43	378	"	1.00	1.285	-.292	-189
	.45	380	"	.995	1.287	-.298	
	.50	385	"	.977	1.288	-.32	
	.55	390	"	.955	1.295	-.347	
	9.00	395	"	.903	1.30	-.402	

DATE	TIME	MIN.	AMP	VOLTS 398	VOLTS TO NI Fe	Ni	
1-2-31-8	P.M. 9.05	400	20	.843	1.303	-.465	
	.09	404	"	.745	1.305	-.567	
	.11	406	"	.605	1.307	.71	
	.12½	407½	"	.50	1.307	-.82	-203.7

Stood 76° hours over New Year - Saturday & Sunday.

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	IDLE
1/4/09		Charge			#6	
	AM 1.15	0	30	16=	73.5	7.25
	1.17	2	"	1.67		
	1.20	5	"	169.7		
	.25	10	"	171.7		
	.35	20	"	173.5		
	.45	30	"	174		
	.55	40	"	174.2		
	2.15	60	"	173.7	78.5	72.5
	.35	80	"	172		
	.55	100	"	171		
	3.15	120	"	170	81.5	72.7
	.35	140	"	170.2		
	.55	160	"	170		
	4.15	180	"	170.2	83.5	73
	.35	200	"	171.2		
	.55	220	"	171		
	5.15	240	"	171	85.5	74

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	IDLE
1/4/09	AM 5.35	260	20	171.5		
	.55	280	"	171.7		
	6.15	300	"	172	87	75
	.35	320	"	172		
	.55	340	"	172.2		
	7.15	360	"	173	87.5	74.5
	.35	380	"	173.7		
	.55	400	"	174.2		
	8.15	420	"	1.76	88	74.5
					(83.2)	
		Discharge			#6	
1/4/09	AM 8.18	—	open	1.575		
	8.20	0	30	145.5		
	22	2	"	142		
	25	5	"	139		
	30	10	"	137		
	.40	20	"	133		
	.50	30	"	131		
	9.00	40	"	129.7		
	.20	60	"	1.27	88	76
	.40	80	"	1.252		
	10.00	100	"	1.232		
	.20	120	"	1.215	89.5	75
	.40	140	"	1.202		
	11.00	160	"	1.19		

DATE	TIME	MIN.	AMP	VOLTS #398			
1/4/09	AM. 11.20	180	30	1.18	91.5	75	
	.40	200	"	1.167			
	P.M. 1200	220	"	1.152			
	.20	240	"	1.137	91.5	74.7	
	.40	260	"	1.12			
	1.00	280	"	1.102			
	.20	300	"	1.08	92.5	74	
	.30	310	"	1.062			
	.40	320	"	1.047			
	.50	330	"	1.005			
	.51	331	"	1.0.0			-165.5

Charge #7

DATE	TIME	MIN.	AMP	VOLTS #398			
1-4-9	P.M. 2.10	0	20	1.462	92.5	75	
	.12	2	"	1.515			
	.15	5	"	1.53			
	.20	10	"	1.567			
	.30	20	"	1.615			
	.40	30	"	1.655			
	.50	40	"	1.662			
	3.10	60	"	1.665	93.7	75.5	
	.30	80	"	1.667			
	.50	100	"	1.66			
	4.10	120	"	1.66	91.5	75.5	

DATE	TIME	MIN.	AMP	VOLTS #398			
1-4-9	PM. 4.30	140	20	1.66			
	.50	160	"	1.663			
	5.10	180	"	1.67	90.5	76	
	.30	200	"	1.68			
	30	220	"	1.69			
	6.10	240	"	1.697	91	76.2	
	.30	260	"	1.70			
	.50	280	"	1.715			
	7.10	300	"	1.725	90.5	76.5	
	.30	320	"	1.74			
	.50	340	"	1.76			
	8.10	360	"	1.78	91.2	76.5	
	.30	380	"	1.795			
	.50	400	"	1.80			
	9.10	420	"	1.815	93	76.5	
					(92.1)		

Discharge #

DATE	TIME	MIN.	AMP	VOLTS #398			
1-4-9	PM. 9.13	—	Open	1.58			
	.15	0	30	1.50			
	.17	2	"	1.405			
	.20	5	"	1.385			
	.25	10	"	1.365			
	.35	20	"	1.337			
	.45	30	"	1.317			
	.55	40	"	[illegible]			

DATE	TIME	MIN	AMPS	VOLTS 391	TEMPS 391	TOLE	
1/4/09	PM 10.15	60	30	127.5	93.5	78	
	.35	80	"	125.7			
	.55	100	"	124			
	11.15	120	"	122.2	93.7	78	
	.35	140	"	121			
	.55	160	"	120			
1/5	AM 12.15	180	"	116.5	94	77.6	
	.35	200	"	117			
	.55	220	"	116.5			
	1.15	240	"	114.5	94.5	78	
	.35	260	"	113			
	.45	270	"	112			
	.55	280	"	111.5			
	2.05	290	"	110.5			
	.15	300	"	109.7	95.5	77.5	
	.25	310	"	108.2			
	.35	320	"	106.5			
	.45	330	"	105			
	.55	340	"	102			
	3.00½	345½	"	100			-1727

DATE	TIME	MIN	AMPS	VOLTS	TEMPS 391	FOLE
1/5/09	Charge				= 8	
	AM 3.20	0	30	146	97.7	77.5
	.22	2	"	150		
	.25	5	"	152.2		
	.30	10	"	155		
	.40	20	"	159.7		
	.50	30	"	163		
	4.00	40	"	165		
	.20	60	"	167	93.5	77
	.40	80	"	166		
	5.00	100	"	166		
	.20	120	"	166	91.5	77
	.40	140	"	166.2		
	6.00	160	"	167		
	.20	180	"	167	89.5	77
	.40	200	"	167.7		
	7.00	220	"	168		
	.20	240	"	169	88.5	77
	.40	260	"	170.2		
	8.00	280	"	171		
	.20	300	"	172.2	88.5	77
	.40	320	"	173.5		
	9.00	340	"	1.762		
	.20	360	"	1.79	89.2	76.5
	.40	380	"	1.807		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
1/5/09	AM 1000	400	30	1.82			
	20	420	"	1.827	91.2	76.5	
					(91.2)		

Discharge #8

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
1/5	AM 1023	—	open	1.58		
	1.025	0	30	1.49		
	27	2	"	1.422		
	30	5	"	1.39		
	35	10	"	1.37		
	45	20	"	1.342		
	55	30	"	1.32		
	11.05	40	"	1.305		
	.25	60	"	1.277	91.7	76.5
	.45	80	"	1.257		
	12.05	100	"	1.24		
	25	120	"	1.222	92.2	76.5
	.45	140	"	1.21		
	1.05	160	"	1.195		
	.25	180	"	1.18	90	75
	.45	200	"	1.165		
	2.05	220	"	1.155		
	.25	240	"	1.14	89	74.6
	.45	260	"	1.125		
	3.05	280	"	1.107		
	.25	300	"	1.09	92	74.2

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle	
1-5-9	3.45	320	20	1.06			
	4.05	340	"	1.012			
	.06½	341½	"	1.00			-170.7

Charge #9

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle
1-5-9	P.M. 4.45	0	30	1.40	93	75
	.47	2	"	1.49		
	.50	5	"	1.525		
	.55	10	"	1.557		
	5.05	20	"	1.60		
	.15	20	"	1.632		
	.25	40	"	1.66		
	.45	60	"	1.667	91.7	75
	6.05	80	"	1.66		
	.25	100	"	1.652		
	.45	120	"	1.627	91	75.2
	7.05	140	"	1.66		
	.25	160	"	1.657		
	.45	180	"	1.665	90.5	75.5
	8.05	200	"	1.67		
	.25	220	"	1.68		
	.45	240	"	1.685	89.5	75.7
	9.05	260	"	1.69		
	.25	280	"	1.707		
	.45	300	"	[illegible]	89.5	76

DATE	TIME	MIN	AMP	VOLTS 392	TEMP 392	TEMP Cell
1-5-9	P.M. 10.05	320	20	174		
	.25	340	"	177.5		
	.45	360	"	180	92.2	76
	11.05	380	"	182.2		
	.25	400	"	183		
	.45	420	"	184	92.5	77
					(90.7)	
			Discharge			9
1/5	PM 11.45	–	0/–	151.5		
	.50	0	20	149		
	.52	2	"	142.2		
	.55	5	"	139.5		
1/6	AM 12.00	10	–	137		
	.10	20	"	134.2		
	.20	30	"	132		
	.30	40	"	131		
	.50	60	"	128	93	77
	1.10	80	"	125.5		
	.30	100	"	124		
	.50	120	"	123	93	77
	2.10	140	"	121		
	.30	160	"	119.7		
	.50	180	"	119	93.2	77.2
	3.10	200	"	117.5		
	.30	220	"	116.2		

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP Cell	
1/6/09	AM 3.50	240	30	115	94	77	
	4.10	260	"	113			
	.30	280	"	111.7			
	.50	300	"	110.2	95	76.5	
	5.10	320	"	107			
	.20	330	"	105.7			
	.30	340	"	103			
	.40	350	"	100			−175
1/6				Charge		10	
	AM 6.00	0	30	144	95	75	
	.02	2	"	148.2			
	.05	5	"	151			
	.10	10	"	154			
	.20	20	"	159			
	.30	30	"	162.5			
	.40	40	"	165			
	7.00	60	"	167	91	75	
	.20	80	"	166			
	.40	100	"	166			
	8.00	120	"	166.5	87.7	76	
	.20	140	"	167			
	.40	160	"	167			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
1/6/09	AM 900	180	30	1.675	86.	75.5
	20	200	"	1.68		
	40	220	"	1.682		
	1000	240	"	1.692	85.7	75
	20	260	"	1.70		
	40	280	"	1.71		
	11.00	300	"	1.72	86	75.5
	.20	320	"	1.742		
	.40	340	"	1.77		
	1200	360	"	1.797	86.2	76
	.20	380	"	1.82		
	40	400	"	1.845		
	1.00	420	"	1.853	88.7	76
				al	(88.3)	
			Discharge #10			
1-6-9	PM 1.03	—	open	1.59		
	.05	0	30	1.507		
	.07	2	"	1.42		
	.10	5	"	1.392		
	.15	10	"	1.367		
	.25	20	"	1.34		
	.35	30	"	1.32		
	.45	40	"	1.20		
	2.05	60	"	1.275	89.5	76.2
	.25	80	"	1.263		

DATE	TIME	MIN	AMPS	VOLTS 399	TEMP 398	TEMP Idle	
1-6-9	P.M. 2.45	100	30	1.237			
	3.05	120	"	1.22	90	76.3	
	.25	140	"	1.205			
	.45	160	"	1.197			
	4.05	180	"	1.182	89.5	76.2	
	.25	200	"	1.172			
	.45	220	"	1.16			
	5.05	240	"	1.145	89	75.5	
	.25	260	"	1.13			
	.45	280	"	1.115			
	6.05	300	"	1.09	90.5	75	
	.25	320	"	1.063			
	.45	340	"	1.022			
	.51	346	"	1.00			-173
				af			
			Charge #11				
1-6-9	PM. 7.15	0	30	1.39	93.5	75	
	.17	2	"	1.475			
	.20	5	"	1.497			
	.25	10	"	1.525			
	.35	20	"	1.58			
	.45	30	"	1.62			
	.55	40	"	1.65			
	8.15	60	"	1.66	91	75.2	

DATE	TIME	MIN	AMP	VOLTS 392	TEMP 398	TEMP clable
1-6-9	P.M. 8.35	80	30	1.657		
	.55	100	"	1657		
	9.15	120	"	1.652	89.2	75.2
	.35	140	"	1.657		
	.55	160	"	166		
	10.15	180	"	1.665	88.2	75.2
	.35	200	"	167		
	.55	220	"	168		
	11.15	240	"	169	86.5	75.2
	.35	260	"	170.2		
	.55	280	"	171		
1/7	AM 12.15	300	"	173	86	75.5
	.35	320	"	175		
	.55	340	"	178.5		
	1.15	360	"	181	86.5	74.5
	.35	380	"	183		
	.55	400	"	185		
	2.15	420	"	185.7	87.2	73.5
					(88.5)	

Discharge #11

DATE	TIME	MIN	AMP	VOLTS 392	TEMP 398	TEMP clable
1/7	AM 2.18	—	open	1.40		
	.20	0	30	151		
	.22	2	"	140		
	.25	5	"	139.5		
	.30	10	"	137.5		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP. 398	TEMP. clable	
1/7/09	AM 2.40	20	30	134.5			
	.50	30	"	132.5			
	3.00	40	"	121			
	.20	60	"	127.7	87.5	74.2	
	.40	80	"	126			
	4.00	100	"	124			
	.20	120	"	123	88	73	
	.40	140	"	121.7			
	5.00	160	"	120.2			
	.20	180	"	119	89	73.5	
	.40	200	"	118			
	6.00	220	"	117			
	.20	240	"	115.7	91	74	
	.40	260	"	114.5			
	7.00	280	"	112.5			
	.20	300	"	111	93.2	74.5	
	.40	320	"	108			
	8.00	340	"	104.7			
	.10	350	"	101.7			
	.15	355	"	100			-177.5

DATE	TIME	MIN	AMPS	VOLTS	TEMP.	
				398	398	Idle
			Charge		#12	
	AM					
1/7/09	8.40	0	30	1.422	93.7	74.5
	.42	2	"	1.47		
	.45	5	"	1.502		
	.50	10	"	1.525		
	9.00	20	"	1.575		
	.10	30	"	1.612		
	.20	40	"	1.645		
	.40	60	"	1.66	92.5	75.5
	1.000	80	"	1.655		
	.20	100	"	1.652		
	.40	120	"	1.652	89.5	74.5
	11.00	140	"	1.655		
	.20	160	"	1.662		
	.40	180	"	1.67	88	74.5
	12.00	200	"	1.675		
	20	220	"	1.677		
	40	240	"	1.68	88	74.5
	1.00	260	"	1.69		
	.20	280	"	1.703		
	.40	300	"	1.717	88.7	75
	2.00	320	"	1.732		
	.20	340	"	1.76		
	.40	360	"	1.785	90	75
	3.00	380	"	1.80		

DATE	TIME	MIN	AMPS	VOLTS	TEMP.	
				#398	#398	Idle
	P.M.					
17/09	3.20	400	20	1.825		
	.40	420	"	1.84	92	76
					(90.3)	
			Discharge #12			
	P.M.					
1-7-9	3.43	–	open	1.58		
	.45	0	20	1.80		
	.47	2	"	1.43		
	.50	5	"	1.387		
	.55	10	"	1.363		
	4.05	20	"	1.34		
	.15	30	"	1.32		
	.25	40	"	1.302		
	.45	60	"	1.277	91.7	77
	5.05	80	"	1.255		
	.25	100	"	1.237		
	.45	120	"	1.225	91.7	77
	6.05	140	"	1.21		
	.25	160	"	1.202		
	.45	180	"	1.193	92	77
	7.05	200	"	1.175		
	.25	220	"	1.165		
	.45	240	"	1.157	92	77
	8.05	260	"	1.142		
	.25	280	"	1.12		
	.45	300	"	[illegible]	93	77.5

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP olde	
1-7-9	P.M. 9.05	320	30	1077			
	.25	240	"	1.022			
	.45	260	"	1.00			-17.5
			Charge #12				
1-7-9	P.M. 9.50	0	30	1.40	95.2	77.5	
	.52	2	"	1.45			
	.55	5	"	1.475			
	10.00	10	"	1.515			
	.10	20	"	1.57			
	.20	30	"	1.61			
	.30	40	"	1.64			
	.50	60	"	1.66	94	77	
	11.10	80	"	1655			
	.30	100	"	1655			
	.50	120	"	1657	88.5	74.5	
1/8	A.M. 12.10	140	"	166			
	.30	160	"	1665			
	.50	180	"	1665	87.5	76.5	
	1.10	200	"	167			
	.30	220	"	168			
	.50	240	"	169	87	76.2	
	2.10	260	"	1697			
	.30	280	"	171			
	.50	300	"	1722	87	75.7	

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP olde
1/8/19	AM 3.10	320	30	174		
	.30	340	"	1765		
	.50	360	"	179.5	87.5	75
	4.10	380	"	181.5		
	.30	400	"	183.7		
	.50	420	"	185	88	74.2
					89.3	
				Discharge #13		
1/8	AM 4.53	—	open	1.59		
	.55	0	30	150		
	.57	2	"	1422		
	5.00	5	"	139		
	.05	10	"	137		
	.15	20	"	134.5		
	.25	30	"	1322		
	.35	40	"	131		
	.55	60	"	1277	87.2	73.5
	6.15	80	"	126		
	.35	100	"	124		
	.55	120	"	122	77.5	72.5
	7.15	140	"	1215		
	.35	160	"	1202		
	.55	180	"	119	88	73
	8.15	200	"	1.18		
	.36	221	"	1.167		

DATE	TIME	MIN	AMP	VOLTS	TEMPS		
				398	398	Idle	
1/8/09	8.55	240	30	1.15	89.	73	
	9.15	260	"	1.14			
	.35	280	"	1.125			
	.55	300	"	1.105	907	73	
	10.15.	320	"	1.082			
	.25.	330	"	1.065			
	35.	340	"	1.045			
	.45	350	"	1.019.			
	51.	356	"	1.00			-178
	51½	356½	"	.999	94.2	73	
				Charge 14			
	AM						
1/8	11.10	0	30	1.402	94.7	73.5	
	.12	2	"	1.46			
	.15	5	"	1.485			
	.20	10	"	1.52			
	30	20	"	1.57			
	.40	30	"	1.607			
	50	40	"	1.635			
	12.10	60	"	1.657	94½	75	
	.30	80	"	1.65			
	50	100	"	1.642			
	1.10	120	"	1.65	917	76	
	.30	140	"	1.65			

DATE	TIME	MIN	AMPS	VOLTS	TEMP	
				398	398	Idle
	P.M.					
1-8-9	1.50	160	30	1.65		
	2.10	180	"	1.662	91	77
	.30	200	"	1.665		
	.50	220	"	1.672		
	3.10	240	"	1.68	907	77.5
	.30	260	"	1.69		
	.50	280	"	1.695		
	4.10	300	"	1.705	91	77.7
	.30	320	"	1.725		
	50	340	"	1.765		
	5.10	360	"	1.79	91	79.2
	.30	380	"	1.815		
	.50	400	"	1.837		
	6.10	420	"	1.94	91	79
					91.9	
				Discharge #14		
	p.m.					
1/8/09	6.13	—	open	1525		
	.15	0	20	1.502		
	.17	2	"	1.43		
	.20	5	"	1.385		
	.25	10	"	1.368		
	.35	20	"	1.337		
	.45	30	"	1.32		
	.55	40	"	1.30		
	7.15	60	"	1.277	925	79

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Adde	
1-8-9	P.M. 7.35	80	30	1.26			
	.55	100	"	1.24			
	8.15	120	"	1.223	93.7	79.2	
	.35	140	"	1.215			
	.55	160	"	1.20			
	9.15	180	"	1.192	95.5	79.5	
	.35	200	"	1.18			
	.55	220	"	1.167			
	10.15	240	"	1.157	97.2	79.7	
	.35	260	"	1.142			
	.55	280	"	1.125			
	11.15	300	"	1117	99.5	82.5	
	.35	320	"	109			
	.55	340	"	105.5			
1/9	12.05	350	"	102			
	.13	358	"	100			-179

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Adde
1/9/09				Charge		15
	AM 12.55	0	30	143	100	83.2
	.57	2	"	147		
	1.00	5	"	149.7		
	1.05	10	"	153		
	.15	20	"	157		
	.25	30	"	161		
	.35	40	"	163.7		
	.55	60	"	165	97	83
	2.15	80	"	164.5		
	.35	100	"	164		
	.55	120	"	164.2	94.5	82.5
	3.15	140	"	165		
	.35	160	"	165		
	.55	180	"	165.5	93	82
	4.15	200	"	166.2		
	.35	220	"	167		
	.55	240	"	167.5	91.5	81
	5.15	260	"	168.2		
	.35	280	"	170.2		
	.55	300	"	171	90.7	80.5
	6.15	320	"	173		
	.35	340	"	176.2		
	.55	360	"	177	90.5	80
	7.15	380	"	179		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP cells
1/9/09	AM 7.35	400	30	182		
	55	420	"	183	90	79.7
					93.4	
				Discharge #15		
1/9	AM 7.58	–	open	159.5		
	8.00	0	30	150.2		
	.02	2	"	142.2		
	.05	5	"	.139		
	.10	10	"	.136		
	.22	22	"	1337		
	.30	30	"	1.32		
	.40	40	"	1.305		
	9.00	60	"	1.28	91.5	79.5
	.20	80	"	1.26		
	.40	100	"	1.242		
	10.00	120	"	1.225	93.5	79.7
	.20	140	"	1.215		
	40	160	"	1.205		
	11.00	180	"	1.192	93	80
	.20	200	"	1.18		
	.40	220	"	1.167		
	P.M. 12.00	240	"	1.15	94.5	79.7
	.20	260	"	1.142		
	.40	280	"	1.127		
	1.00	300	"	1.107	95.5	80

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP cells	
9/09	PM 1.20	320	30	1.08			
	40	340	"	1.032			
	.50	350	"	100			–1.75
	.50½	350½	"	.995	98.2	80.5	

Stood 41½ hours, over Sunday.

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP cells
1/11				Charge #16		
	AM 7.30	0	30	154.5	70	70
	.32	2	"	161		
	.35	5	"	164.5		
	.40	10	"	168		
	.50	20	"	172		
	8.00	30	"	173		
	.10	40	"	172		
	.30	60	"	171.7	73.7	70
	.50	80	"	170.5		
	9.10	100	"	1.70		
	.30	120	"	1.695	76.7	70
	52	147	"	1.697		
	10.16	160	"	1.70		
	30	180	"	1.71	78.7	70
	50	200	"	1.712		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
	AM					
1/11	11.10	220	20	1.715		
	30	240	"	1.72	79.7	70
	50	260	"	1.722		
	12.10	280	"	1.727		
	30	300	"	1.735	81.2	70.7
	.50	320	"	1.752		
	1.10	340	"	1.772		
	.30	360	"	1.795	84.5	71.7
	.50	380	"	1.805		
	2.10	400	"	1.93		
	.30	420	"	1.835	86.2	74.1
					78.8	
			Discharge		#16	
	P.M.					
1-11-09	2.33	–	open	1.592		
	.35	0	20	1.505		
	.37	2	"	1.42		
	.40	5	"	1.387		
	.45	10	"	1.367		
	.55	20	"	1.34		
	3.05	30	"	1.32		
	.15	40	"	1.30		
	35	60	"	1.28	90	74.2
	.55	80	"	1.26		
	4.15	100	"	1.242		
	.35	120	"	1.232	89	74.7

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
	P.M.						
1-11-09	4.55	140	20	1.217			
	5.15	160	"	1.207			
	.35	180	"	1.197	89	75.2	
	.55	200	"	1.185			
	6.15	220	"	1.175			
	.35	240	"	1.16	90	75.5	
	.55	260	"	1.145			
	7.15	280	"	1.132			
	.35	300	"	1.105	91.5	76	
	.55	320	"	1.077			
	8.15	340	"	1.027			
	.21	346	"	1.00			–.173
	.22½	347½	"	.992			

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle
			Charge #17			
1-11-09	P.M. 8.40	0	30	1.397	⑨③	
	.42	2	"	1.47		
	.45	5	"	1.50		
	.50	10	"	1.55		
	9.00	20	"	1.585		
	.10	30	"	1.63		
	.20	40	"	1.642		
	40	60	"	1.66	92.5	76
	10.00	80	"	1.655		
	.20	100	"	1.652		
	40	120	"	1.65	94	76.5
	11.00	140	"	16.6		
	.20	160	"	166.2		
	.40	180	"	166.5	90.5	78
1/12	AM 12.00	200	"	167.7		
	.20	220	"	168		
	.40	240	"	169	90	78.7
	1.00	260	"	169.5		
	.20	280	"	171		
	.40	300	"	172	89	77.5
	2.00	320	"	174		
	.20	340	"	176.2		
	.40	360	"	179	88.2	77.5
	3.00	380	"	181		

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle
1/12/09	AM 3.20	400	30	182.5		
	.40	420	"	183.5	89.5	77.5
					⑨①	
			Discharge #17			
1/12	AM 3.43	–	open	159.2		
	.45	0	30	151		
	.47	2	"	145		
	.50	5	"	139.7		
	.55	10	"	137		
	4.05	20	"	134		
	.15	30	"	132.5		
	.25	40	"	131		
	.45	60	"	128	90	77.5
	5.05	80	"	126		
	.25	100	"	125		
	.45	120	"	123.5	90.5	77.5
	6.05	140	"	122.5		
	.25	160	"	121.5		
	.45	180	"	120.2	90.2	77.2
	7.05	200	"	119		
	.25	220	"	118		
	.45	240	"	116.5	90.5	77
	8.05	260	"	1.137		
	.25	280	"	1.125		
	.45	300	"	1.112		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	TEMPS Idle	
	AM						
1/12/09	9.05	320	30	1.09	92	77	
	25	340	"	1.042			
	31	346	"	1.027			
	35	350	"	1.007			
	37	352	"	1.00			−176

Charge #18

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	TEMPS Idle
	AM					
1/12/09	9.55	0	30	1.412		
	.57	2	"	1.46		
	1000	5	"	1.485		
	.05	10	"	1.52		
	.15	20	"	1.575	92.2	77
	.25	30	"	1.62		
	35	40	"	1.65		
	.55	60	"	1.66	91.2	77
	11 15	80	"	1.655		
	.35	100	"	1.652		
	.55	120	"	1.657	89	77
	12 15	140	"	1.66		
	.37	162	"	1.662		
	.55	180	"	1.662	877	767
	1.15	200	"	1.677		
	.35	220	"	1.68		
	.55	240	"	1.682	87	76.2

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
	P.M.					
-12-09	2,15	260	20	1,70		
	.35	280	"	1,71		
	.55	300	"	1,725	86.5	76
	3.15	320	"	1,745		
	.35	340	"	1,782		
	.55	360	"	1,802	87	76
	4.15	380	"	1,82		
	.35	400	"	1,84		
	.55	420	"	1,84	87.2	76
					(88.6)	

Discharge #18

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
	P.M.					
1-11-	4.58	—	open	1.685		
	5.00	0	20	1,50		
	.02	2	"	1,425		
	.05	5	"	1,39		
	.10	10	"	1,37		
	.20	20	"	1,34		
	.30	30	"	1,325		
	.40	40	"	1,31		
	6.00	60	"	1,297	897	76
	.20	80	"	1,26		
	.40	100	"	1,24		
	7.00	120	"	1,227	89	76
	.20	140	"	1,217		
	.40	160	"	1,205		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 olde	
1-12-	P.M. 8.00	180	20	1.195	90	76.2	
	.20	200	"	1.187			
	.40	220	"	1.175			
	9.00	240	"	1.16	91.5	76.2	
	.20	260	"	1.15			
	.40	220	"	1.135			
	10.00	300	"	1.115	93	76.7	
	.20	320	"	1.087			
	.40	340	"	1.042			
	.53	353	"	1.00			= 176.5

Charge = 19

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 olde
1/12	PM 11.15	0	30	141.7	94.5	78.5
	.17	2	"	1.46		
	.20	5	"	149		
	.25	10	"	152		
	.35	20	"	157.5		
	.45	30	"	161.5		
	.55	40	"	164		
1/13	AM 12.15	60	"	165	94	79.2
	.35	80	"	164.5		
	.55	100	"	164.2		
	1.15	120	"	165	90.5	78.5

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 olde
1/13/09	AM 1.35	140	30	165		
	.55	160	"	165.7		
	2.15	180	"	166.2	89	78.5
	.35	200	"	167		
	.55	220	"	168		
	3.15	240	"	168.5	87.5	77.2
	.35	260	"	169.7		
	.55	280	"	171		
	4.15	300	"	172.5	86.5	77
	.35	320	"	173.5		
	.55	340	"	176.2		
	5.15	360	"	179	86	76
	.35	380	"	182		
	.55	400	"	184		
	6.15	420	"	185	87	75
					(89.6)	

Discharge = 19

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 olde
1/13	A.M. 6.18	–	[illegible]	15.9		
	.20	0	30	151		
	.22	2	"	142.2		
	.25	5	"	139		
	.30	10	"	137		
	.40	20	"	134		
	.50	30	"	132.2		
	7.00	40	"	131		

DATE	TIME	MIN.	AMPS	VOLTS #398	TEMP #398	TEMP Idle	
1/12/49	7.20	60	30	1.25	81.5	74	
	.40	80	"	1.242			
	8.00	100	"	1.24			
	.20	120	"	1.227	86	74	
	.40	140	"	1.215			
	9.00	160	"	1.205			
	.20	180	"	1.192	86.5	74	
	.40	200	"	1.185			
	10.00	220	"	1.17			
	.20	240	"	1.162	87.	74.	
	.40	260	"	1.142			
	11.00	280	"	1.13			
	.20	300	"	1.11	88.5	74.5	
	.40	320	"	1.08			
	.50	330	"	1.062			
	1200	340	"	1.04			
	.10	350	"	1.012			
	.13	353	"	1.00	91	75	– 176.5
				Charge #20			
	PM.						
1/13	12.25	0	30				
	.55	30	"		92	75	
	2.55	150	"		87	75.2	
	4.55	270	"		95.5	75.5	

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle	
13	6.55	390	30		89	75.5	
	8.55	510	"		93	76	
	10.55	630	"		94.5	77.2	
	12.55	750	"		94.5	77	
	2.55	870	"		94	75.5	
	3.25	900	"	164.5			– 15 hrs.
					91.2		
1.14				Discharge #20			
	A.M.						
	3.28	–	open	160			
	.30	0	30	151			
	.32	2	"	144			
	.35	5	"	141			
	.40	10	"	138.2			
	.50	20	"	136			
	4.00	30	"	134			
	.10	40	"	132.2			
	.30	60	"	129.7	91.5	74.5	
	.50	80	"	127			
	5.10	100	"	126			
	.30	120	"	124.5	91	74.5	
	.50	140	"	123			
	6.10	160	"	122			
	.30	180	"	121	91.2	74.2	
	.50	200	"	120.2			
	7.10	220	"	119			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	IDLE	
1/14/09	AM 7.30	240	30	118	90.5	74.5	
	.50	260	"	117			
	8.10	280	"	1115			
	.30	300	"	114	90.5	73.5	
	.50	320	"	1125			
	9.10	340	"	1.107			
	.30	360	"	1.082	90	74.	
	.50	380	"	1.067			
	1005	395	"	1.037			
	.10	400	"	1.022			
	.15	405	"	1.015			
	.20	410	"	1.00			−205
	.25	415	"	.987			
	.30	420	"	.965	93	73.7	
	.35	425	"	.94			
	.40	430	"	.92			
	.45	435	"	.90			
	.50	440	"	.875			
	.55	445	"	.847			
	11.00	450	"	.782			
	.05	455	"	.67			
	.06½	456½	"	.50			−228.2

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Idle
			Charge	#21		
1/14/09	AM 11.55	0	30			
	PM 12.25	30	"		94.5	73.7
	2.25	150	"		89.2	75
	4.25	270	"		87.2	75.2
	6.25	390	"		92.5	75.5
	8.25	510	"		92	76.2
	10 25	630	"		94.7	76.5
1/15	AM 1225	750	"		92.7	74
	225	870	"		95	74.5
	55	900	"	184.5		
					(91.7)	
				Discharge	#21	
1/15	AM 2.58	—	open	150		
	3.00	0	30	151		
	.02	2	"	143		
	.05	5	"	140		
	.10	10	"	138		
	.20	20	"	135		
	.30	30	"	133		
	.40	40	"	132		
	4.00	60	"	128	90	73.2
	.20	80	"	126		
	.40	100	"	124.5		
	5.00	120	"	123	90	73

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 Idle	
1/15/09	5.20 AM	140	30	122.2			
	.40	130	"	121.2			
	6.00	180	"	120.2	90	73	
	.20	200	"	119.5			
	.40	220	"	118.5			
	7.00	240	"	117.5	87.2	73	
	.20	260	"	116.5			
	.40	280	"	115			
	8.00	300	"	114	8.9	7.2	
	.20	320	"	1.122			
	.40	340	"	1.112			
	9.00	360	"	1.092	91.2	72	
	20	380	"	1.072			
	.30	390	"	1.061			
	.40	400	"	1.042			
	50	410	"	1.022			
	57	417	"	1.00			-208.5
	10.00	420	"	.982	94.7	72	
	.10	430	"	.932			
	.20	440	"	.817			
	.27	447	"	.50			-223.5

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 Idle	DEG. ABOVE IDLE
		Charge #22					
/09	AM 11.35	0	30	1.52	94.7	73	21.7
	37	2	"	1.555			- Added H_2O
	40	5	"	1.562			
	45	10	"	1.582			
	55	20	"	1.617			
	1205	30	"	1.64			
	.15	40	"	1.658			
	.25	50	"	1.665			
	.35	60	"	1.677	92.7	74.2	18.5
	55	80	"	1.67			
	1.15	100	"	1.662			
	.35	120	"	1.656	90.5	74.5	16
	.55	140	"	1.663			
	2.15	160	"	1.663			
	.35	180	"	1.667	89.5	75	14.5
	.55	200	"	1.672			
	3.15	220	"	1.675			
	.35	240	"	1.68	88.5	76	12.5
	.55	260	"	1.682			
	4.15	280	"	1.69			
	.35	300	"	1.697	877	77	10.7
	.55	320	"	1.70			
	5.15	340	"	1.702			
	.35	360	"	1.722	877	772	10.5

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle	DEG. ABOVE IDLE
1-15-09	P.M. 5.55	380	30	1,725			
	6.15	400	"	1,75			
	.35	420	"	1,77	88.3	77.2	11.1
	.55	440	"	1,797			
	7.15	460	"	1805			
	.35	480	"	1,827	89.2	77.2	12
	.55	500	"	1,852			
	8.15	520	"	1,847			
	.35	540	"	1,847	91	77.5	13.5
	.55	560	"	1,845			
	9.15	580	"	1,845			
	.35	600	"	1,85	92.5	77.5	15
	.55	620	"	1,85			
	10.15	640	"	1842			
	.35	660	"	1,842	93.7	77.5	16.2
	.55	680	"	1,842			
	11.15	700	"	184			
	.35	720	"	184.2	94.5	78.5	16
	.55	740	"	184			
1/16	AM 12.15	760	"	184.1			
	.35	780	"	183.7	96	79	17
	.55	800	"	183.7			
	1.15	820	"	184			
	.35	840	"	184	96	78.7	17.3
	.55	860	"	184.1			

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle	DEG. ABOVE IDLE
1/16/09	AM 2.15	880	30	184			
	.35	900	"	184.2	95	77.7	17.3
				Discharge	91.7		22
1/16	AM 2.38	—	off	159			17.3
	.40	0	30	151			
	.42	2	"	142.2			
	.45	5	"	139			
	.50	10	"	137			
	3.00	20	"	135			
	.10	30	"	133			
	.20	40	"	131.5	92.7	76.5	16.2
	.40	60	"	128.2			
	4.00	80	"	127	92	75.5	16.5
	.20	100	"	125			
	.40	120	"	123	90	75.5	14.5
	5.00	140	"	122			
	.20	160	"	121	87.5	74.5	13
	.40	180	"	120.2			
	6.00	200	"	119.5	92	74	18
	.20	220	"	118.5			
	.40	240	"	117	88.5	74	14.5
	7.00	260	"	116			
	.20	280	"	115	89	73	16
	.40	300	"	114			

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP IDLE	DEG. ABOVE IDLE	
1/16/09	AM 8.00	320	30	112.5	89	73	16	
	.20	340	〃	111				
	.40	360	〃	1.092	89.7	73	16.7	
	9.00	380	〃	1.07				
	.10	390	〃	1.055				
	.20	400	〃	1.04	92.2	73	19.2	
	.30	410	〃	1.017				
	.36	416	〃	1.00				-208
	.40	420	〃	.98				
	.50	430	〃	.902				
	10.00	440	〃	.597				
	.03	443	〃	.150	96	73	23	-221.5
				0			.0	

Stood 52½ hours over Sunday.

DATE	TIME	MIN	AMP	VOLTS 398	TEMPS 398	TEMPS Idle
1/18/09				Charge		〃 .23
	AM 4.30	0	30	163	71.5	74.5
	.32	2	〃	165		
	.35	5	〃	166.5		
	.40	10	〃	168		
	.50	20	〃	170.5		
	5.00	30	〃	172		
	.10	40	〃	172.2		
	.30	60	〃	170	77	72.5
	.50	80	〃	169		
	6.10	100	〃	168.2		
	.30	120	〃	168.5	80.5	73
	.50	140	〃	168.2		0
	7.10	160	〃	168.2		
	.30	180	〃	169	81.5	73.5
	.50	200	〃	169		
	8.10	220	〃	1.695		
	.30	240	〃	1.697	83	73.2
	.50	260	〃	1.70		
	9.10	280	〃	1.707		
	.30	300	〃	1.707	83.7	73.2
	.50	320	〃	1.715		
	10.10	340	〃	1.722		
	.30	360	〃	1.73	84	73
	.50	380	〃	1.74		

DATE	TIME	MIN.	AMP	VOLTS	TEMP		
				398	398	Idle	
	PM.						
1-18-09	11,10	400	30	1.76			
	.30	420	"	1.777	85	73.2	
					80.8		

Discharge # 23

DATE	TIME	MIN.	AMP	VOLTS	TEMP		
				398	398	Idle	
	A.M.						
1-18-09	11.33	–	open	1.58			
	.35	0	30	1.60			
	.37	2	"	1.422			
	.40	5	"	1.325			
	.45	10	"	1.362			
	.55	20	"	1.327			
	P.M. 12.05	30	"	1.318			
	.15	40	"	1.30			
	.35	60	"	1.28	85.7	73.7	
	.55	80	"	1.26			
	1.15	100	"	1.242			
	.35	120	"	1.23	86.7	74	
	.55	140	"	1.22			
	2.15	160	"	1.205			
	.35	180	"	1.195	87.7	74.2	
	.55	200	"	1.192			
	3.15	220	"	1.18			
	.35	240	"	1.17	9.95	75	
	.55	260	"	1.16			
	4.15	280	"	1.145			
	.35	300	"	1.127	92	76	

DATE	TIME	MIN	AMP	VOLTS	TEMP		
				398	398	Idle	
	PM						
1/18/09	4.55	320	30	1.097			
	5.15	340	"	1.057			
	.20	345	"	1.02			
	.22½	347½	"	1.00	93.	77.	– 173.7

Charge # 24

DATE	TIME	MIN	AMP	VOLTS	TEMP		
				398	398	Idle	
	PM						
1/18	5.30	0	30	1.40	93.2	77	
	.32	2	"	1.48			
	.35	5	"	1.512			
	.40	10	"	1.542			
	.50	20	"	1.59			
	6.00	30	"	1.627			
	.10	40	"	1.65			
	.30	60	"	1.66	94.2	77.5	
	.50	80	"	1.652			
	7.10	100	"	1.652			
	.30	120	"	1.65	91.7	78	
	.50	140	"	1.65			
	8.10	160	"	1.655			
	.30	180	"	1.66	90	78	
	.50	200	"	1.665			
	9.10	220	"	1.677			
	.30	240	"	1.682	89.5	78	
	.50	260	"	1.697			

DATE	TIME	MIN	AMPS	VOLTS	TEMP	
				398	398	Idle
1/18/09	PM 10.10	280	30	1.70		
	.30	300	"	1.72	89.	77.7
	.50	320	"	174		
	11.10	340	"	176		
	.30	360	"	178	90	78
	.50	380	"	179		
1/19	AM 12.10	400	"	180		
	.30	420	"	181	90.5 (91)	77.5

Discharge #24

DATE	TIME	MIN	AMPS	VOLTS	TEMP	
1/19	AM 12.33	—	open	158.2		
	.35	0	30	150.5		
	.37	2	"	141.5		
	.40	5	"	138		
	.45	10	"	137		
	.55	20	"	133		
	1.05	30	"	132.5		
	.15	40	"	130		
	.35	60	"	127.7	90	76.5
	.55	80	"	125.7		
	2.15	100	"	124.2		
	.35	120	"	122.5	89	75.5
	.55	140	"	121.7		
	3.15	160	"	120.5		
	.35	180	"	119.7	88	75

DATE	TIME	MIN	AMPS	VOLTS	TEMPS		
				398	398	Idle	
1/19/09	AM 3.55	200	30	119			
	4.15	220	"	118.2			
	.35	240	"	117.	89.2	75	
	.55	260	"	116.			
	5.15	280	"	114.5			
	.35	300	"	113	92	75	
	.55	320	"	111.5			
	6.05	330	"	110.2			
	.25	350	"	106			
	.35	360	"	102.2	92	74.5	
	.40	365	"	100			−182.5

Charge #25

DATE	TIME	MIN	AMPS	VOLTS	TEMPS	
1/19	AM 6.50	0	30	142	92.5	74.2
	.52	2	"	147.7		
	.55	5	"	150		
	7.00	10	"	153		
	.10	20	"	158.1		
	.20	30	"	162		
	.30	40	"	165		
	.50	60	"	165	92	74.5
	8.10	80	"	165		
	.30	100	"	165		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 ddle
1-19-09	8.50	120	30	1645	90	75
	9.10	140	"	1,657		
	.20	160	"	1,655		
	.50	180	"	1,66	87.2	75
	10.10	200	"	1,667		
	.30	220	"	1,675		
	.50	240	"	1,68	87.5	75
	11,10	260	"	1,69		
	.30	280	"	1,702		
	.50	300	"	1717	88.	75
	PM 12.10	320	"	1,74		
	.30	340	"	1,76		
	.50	360	"	1,77	89.2	76.2
	1,10	380	"	1.812		
	.30	400	"	1.822		
	.50	420	"	1.827	90.5	76.5
					89.6	#
				Discharge 2.5		
1|19|	PM 1.53	—	open	1.582		
	.55	0	30	1.505		
	.57	2	"	1.412		
	2.00	5	"	1.382		
	.05	10	"	1.367		
	.15	20	"	1.337		
	.25	30	"	1.32		

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	 ddle	
1|19|0.8	PM 2.35	40	30	1.307			
	55	60	"	1.29	90.5	762	
	3.15	80	"	1.275			
	.35	100	"	1.247			
	.55	120	"	1.237	91	76.2	
	4.15	140	"	1.225			
	.35	160	"	1.218			
	.55	180	"	1.21	91	76	
	5.15	200	"	1.207			
	.35	220	"	1.19			
	.55	240	"	1.18	92	76	
	6.15	260	"	1.165			
	.35	280	"	1.15			
	.55	300	"	1.132	93.2	76	
	7.15	320	"	1.11			
	.25	330	"	1.10			
	.35	340	"	1.082			
	.45	350	"	1.057			
	.55	360	"	1.027	96.7	76	
	8.00	365	"	1.01			
	.02	367	"	1.00			-183.5

Charge # 26

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP [illegible]
1/19/09	PM 8 15	0	30	1.405	97.	76
	17	2	"	1.462		
	20	5	"	1.475		
	25	10	"	1.51		
	35	20	"	1.572		
	45	30	"	1.595		
	55	40	"	1.615		
	9.15	60	"	1.65	95.5	76
	35	80	"	1.642		
	55	100	"	1.642		
	10 15	120	"	1.642	93.5	76
	35	140	"	1.645		
	55	160	"	1.647		
	11.15	180	"	165.5	91.2	76.7
	35	200	"	166		
	55	220	"	166		
1/20	AM 12.15	240	"	168	89.5	76.2
	35	260	"	168.5		
	55	280	"	170		
	1.15	300	"	171.7	88	75.5
	35	320	"	173		
	55	340	"	175		
	2.15	360	"	178	90	74.5
	35	380	"	180.2		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP [illegible]
1/20/09	AM 2.55	400	30	182		
	3.15	420	"	183	89 91.7	74.5

Discharge # 26

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP [illegible]
1/20	A.M. 3.18	—	off	159		
	20	0	30	150		
	22	2	"	142.5		
	25	5	"	138.5		
	30	10	"	137		
	40	20	"	134		
	50	30	"	133		
	4.00	40	"	130.5		
	20	60	"	128	89.5	75
	40	80	"	126		
	5.00	100	"	124.5		
	20	120	"	123	89.2	74.7
	40	140	"	122		
	6.00	160	"	121		
	20	180	"	120	89.2	74.5
	40	200	"	119		
	7.00	220	"	118.5		
	20	240	"	117	89.5	74.5
	40	260	"	116.2		
	8.00	280	"	115		
	20	300	"	113	91.7	74.5

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
1/20/09	AM 8.40	320	30	111			
	900	340	"	1.09			
	.10	350	"	1.06			
	.20	360	"	1.022			
	.25	365	"	1.002			
	.25½	365½	"	1.00			-182.7
			Charge # 27				
1-20-09	AM. 10.20	0	10	1.34	90.7	75.2	
	.34	4	"	1.40			
	.40	10	"	1.412			
	.50	20	"	1.427			
	11.00	30	"	1.442			
	.10	40	"	1.46			
	.30	60	"	1.492	97	76	
	.50	80	"	1.512			
	P.M. 12.10	100	"	1.535			
	.30	120	"	1.55	85.5	76.5	
	.50	140	"	1.575			
	1.10	160	"	1.59			
	.30	180	"	1.592	84.5	78	
	.51	201	"	1.595			
	2.10	220	"	1.595			
	.30	240	"	1.595	84	78	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
1/20/09	PM 2.50	260	10	1.592		
	3.10	280	"	1.59		
	.30	300	"	1.59	93	78.2
	.50	320	"	1.59		
	4.10	340	"	1.592		
	.30	360	"	1.59	82.5	78.5
	.50	380	"	1.59		
	5.10	400	"	1.59		
	.30	420	"	1.59	82	79
	.50	440	"	1.59		
	6.10	460	"	1.59		
	.30	480	"	1.59	81.7	79
	.50	500	"	1.59		
	7.10	520	"	1.59		
	.30	540	"	1.59	81	787
	.50	560	"	1.591		
	8.10	580	"	1.592		
	.30	600	"	1.592	80	78.2
	.50	620	"	1.592		
	9.10	640	"	1.595		
	.30	660	"	1.597	80.2	78.2
	.50	680	"	1.605		
	10.10	700	"	1.605		
	.30	720	"	1.602	80.5	78.5
	.50	740	"	1.60		

DATE	TIME	MIN	AMPS	VOLTS	TEMP	
				398	398	Idle
1/20/09	PM 11.10	760	30	160.5		
	.30	780	"	161	81.5	80
	.50	800	"	161		
1/21	AM 12.10	820	"	161.7		
	.30	840	"	162	81	79.7
	.50	860	"	162.2		
	1.10	880	"	162.5		
	.30	900	"	163	80.5	79
	.50	920	"	164		
	2.10	940	"	164		
	.30	960	"	165	79.2	77.5
	.50	980	"	165		
	3.10	1000	"	166		
	.30	1020	"	166	78.5	76.2
	.50	1040	"	167.7		
	4.10	1060	"	168		
	.30	1080	"	168.2	78.2	75.5
	.50	1100	"	169		
	5.10	1120	"	170		
	.30	1140	"	170.2	78	75.5
	.50	1160	"	171		
	6.10	1180	"	171		
	.30	1200	"	171.5	78	75
	.50	1220	"	172		
	7.10	1240	"	172		

DATE	TIME	MIN	AMPS	VOLTS	TEMPS		
				398	398	Idle	
1/21/09	AM 7.30	1260	70	173	78 81.6	75	- 21 hrs. @ 10
			Discharge #27				
1/21	AM 7.33	—	Open	158.5			
	.35	0	30	150			
	.37	2	"	141			
	.40	5	"	135.5			
	.45	10	"	133.5			
	.55	20	"	131			
	8.05	30	"	129.5			
	.15	40	"	128			
	.35	60	"	126	81.2	74.2	
	.55	80	"	1.242			
	9.15	100	"	1.237			
	.35	120	"	1.22	83.7	74.2	
	.55	140	"	1.212			
	10.26	171	"	1.20			
	.35	180	"	1.198	86	74	
	.55	200	"	1.192			
	11.15	220	"	1.18			
	.35	240	"	1.172	87.2	74	
	.55	260	"	1.16			
	12.15	280	"	1.142			
	.35	300	"	1.125	91.2	74	
	.55	320	"	1.107			

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP. 392	 Idle	
1/21/09	PM 1.15	340	30	1,025			
	.25	360	"	1.05	932	74	
	.45	370	"	1.02			
	.49	374	"	1.00			-187

Charge # 28.

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP. 392	 Idle
1-21-09	P.M. 2.00	0	1.0	1.29	95.	74
	.02	2	"	1.325		
	.05	5	"	1.357		
	.10	10	"	1.37		
	.20	20	"	1.395		
	.30	30	"	1.415		
	.40	40	"	1.432		
	3.00	60	"	1.462	90	73
	.20	80	"	1.495		
	.40	100	"	1.52		
	4.00	120	"	1.537	88.	75
	.20	140	"	1.56		
	.40	160	"	1.58		
	5.00	180	"	1.59	85.7	75.5
	.20	200	"	1.592		
	.40	220	"	1.595		
	6.00	240	"	1.592	83.5	757
	.20	260	"	1.59		
	.40	280	"	1.59		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 Idle
1/21/09	PM 7.00	300	10	1.59	827	76
	20	320	"	1.59		
	40	340	"	1.59		
	8.00	360	"	1.59	82	76
	.20	380	"	1.587		
	.40	400	"	1.587		
	9.00	420	"	1.587	815	762
	.20	440	"	1.585		
	40	460	"	1.585		
	1000	480	"	1.585	81	765
	.20	500	"	1.587		
	.40	520	"	1.59		
	11.00	540	"	159	81.2	78
	.20	560	"	159		
	.40	580	"	159.7		
1/22	AM 12.00	600	"	159	81	78
	.20	620	"	159.7		
	.40	640	"	160		
	1.00	660	"	160	78.7	76.5
	.20	680	"	160.5		
	.40	700	"	160.5		
	2.00	720	"	161	79	77
	.20	740	"	161		
	.40	760	"	161		
	3.00	780	"	161	79	77

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Idle	
1/22/09	AM 3.20	800	10	161.5			
	.40	820	"	161.7			
	4.00	840	"	162	79	77	
	.20	860	"	162.5			
	.40	880	"	163			
	5.00	900	"	163.5	79	77	
	.20	920	"	164.2			
	.40	940	"	164			
	6.00	960	"	164.5	78.7	76.7	
	.20	980	"	165			
	.40	1000	"	165.5			
	7.00	1020	"	166.2	78	76.2	
	.20	1040	"	167			
	.40	1060	"	165.7			
	8.00	1080	"	168.2	78	75.5	
	.20	1100	"	169			
	.40	1120	"	169.5			
	9.00	1140	"	170	78	75.2	
	.20	1160	"	170.5			
	.40	1180	"	171.5			
	10.00	1200	"	171.7	78	75.2	
	.20	1220	"	172			
	.40	1240	"	172			
	11.00	1260	"	172	79.2	75.5	-21 hrs @ 10
					(81.6)		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	Idle
				Discharge #28		
1-22-09	AM. 11.03	-	open	1.58		
	.05	0	30	1.80		
	.07	2	"	1.40		
	.10	5	"	1.357		
	.15	10	"	1.337		
	.25	20	"	1.315		
	.35	30	"	1.30		
	.45	40	"	1.295		
	P.M 12.05	60	"	1.26	94.5	76
	.25	80	"	1.245		
	.45	100	"	1.235		
	1.05	120	"	1.22	87.2	76.2
	.25	140	"	1.21		
	.45	160	"	1.20		
	2.05	180	"	1.19	87.7	76.2
	.25	200	"	1.18		
	.45	220	"	1.172		
	3.05	240	"	1.167	87.7	74.5
	.25	260	"	1.155		
	.45	280	"	1.137		
	4.05	300	"	1.117	91	74
	.25	320	"	1.097		
	.35	330	"	1.082		
	.45	340		1.067		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP. 398	Idle	
1/22/09	PM 4.55	350	30	1.057			
	5.00	355	"	1.045			
	.05	360	"	1.037	94	74	
	.10	365	"	1.022			
	.15	370	"	1.00			-185

Charge #29

				398	Fe	Ni	TEMP 398	Idle	
1/22/09	PM 5.35	0	10	1.317	1.37	-0.62	94.2	(20.2) 74	Electrodes + 10 Sp.=60 m 1 " = 6 "
	37	2	"	1.362	1.40	-.047			
	40	5	"	1.371	1.41	-.045			
	45	10	"	1.381	1.412	-.037			
	55	20	"	1.397	1.417	-.025			
	6.05	30	"	1.417	1.425	-.01			
	15	40	"	1.44	1.432	-.005			
	35	60	"	1.47	1.45	.017	88	(14) 74	
	55	80	"	1.502	1.465	.032			
	7.15	100	"	1.527	1.475	.042			
	35	120	"	1.55	1.485	.052	86.5	(12.5) 74	
	55	140	"	1.57	1.492	.062			
	8.15	160	"	1.586	1.502	.071		(10)	
	35	180	"	1.595	1.51	.075	85	75	
	55	200	"	1.599	1.51	.078			
	9.15	220	"	1.597	1.51	.077			

DATE	TIME	MIN.	AMP	VOLTS 398	Fe	Ni	TEMP 398	Idle
1/22/09	PM 9.35	240	10	1.595	1.506	.078	84	(8.5) 75.5
	55	260	"	1.593	1.502	.077		
	10.15	280	"	1.591	1.50	.077		(7)
	35	300	"	1.59	1.50	.077	83	76
	55	320	"	1.59	1.497	.08		
	11.15	340	"	1.592	1.492	.081		(5.7)
	.35	360	"	1.586	1.49	.08	82.7	77
	.55	380	"	159	149	.081		
	12.15	400	"	158.6	149	.08		(4.5)
	.35	420	"	159	(149.)	.081	82.5	78
	.55	440	"	159	148.6	.084		
	1.15	460	"	159	148.6	.085		(4)
	.35	480	"	159	148.4	.09	82	78
	.55	500	"	159	148.1	.09		
	2.15	520	"	159	147	.09		(3.5)
	.35	540	"	159.1	147.1	.091	81	77.5
	.55	560	"	159.1	148.8	.098		
	3.15	580	"	159.9	148.9	.10		3.3
	.35	600	"	159.9	148.9	.10	80	76.7
	.55	620	"	159.9	147.8	.101		
	4.15	640	"	160	147.6	.101		(3)
	.35	660	"	160	147.8	.11	79.5	76.5
	.55	680	"	160.2	147.4	.11		
	5.15	700	"	160.7	147.2	.111		(2.5)
	.30	720	"	160.6	147	.116	79.5	77

DATE	TIME	MIN	AMP	VOLTS 398	Fe	Ni	TEMPS 398	Idle
1/23/29	AM 5.55	740	10	161	.147	11.9		
	6.15	760	"	161	1459	.12		2.7
	.35	780	"	161	[illegible]	12.1	79.7	77
	.55	800	"	161.5	146.5	12.2		
	7.15	820	"	161.7	146.7	12.6		2.5
	.35	840	"	162	147	.13	79.5	77
	.55	860	"	162.1	147	.13		
	8.15	880	"	163	147.2	13.6		2
	.35	900	"	1.635	1.48	.14	79	77
	.55	920	"	1.622	1.48	.141		
	9.15	940	"	1.64	1.48	.145		2.2
	.35	960	"	1.642	1.48	.145	79.2	77
	.55	980	"	1.65	1.482	.157		
	10.15	1000	"	1.657	1.483	.157		1.8
	.35	1020	"	1.66	1.477	.16	785	767
	.55	1040	"	1.665	1.493	.162		
	11.15	1060	"	1.673	1.495	.165		2.2
	.35	1080	"	1.678	1.497	.177	787	765
	.55	1100	"	1.682	1.498	.177		
	PM 12.15	1120	"	1.695	1.502	.177		3.2
	.35	1140	"	1.697	1.505	.182	787	755
	.55	1160	"	1.703	1.512	.182		
	1.15	1180	"	1.707	1.517	.18		3.5
	.35	1200	"	1.715	1.518	.18	797	752
	.55	1220	"	1.718	1.524	.18		

DATE	TIME	MIN.	AMP	VOLTS 398	VOLTS TONIA Fe	Ni	TEMP 398	Idle
1-23-29	P.M. 2.15	1240	30	1.718	1.522	.18		3.8
	.35	1260	"	1.719	1.522	181	79 (81.7)	752
				oc.	oc.	oc.		oc.
				TEMP				
				398	389#	Idle		
				Discharge 29				
1/23	PM 2.38	—	open	1.577				
	2 40	0	30	1.48				
	42	2	"	1.39				
	45	5	"	1.35				
	50	10	"	1.332				
	3.00	20	"	1.312				
	.10	30	"	1.29				
	.20	40	"	1.279				
	.40	60	"	1.257	83	76.5		
	4.00	80	"	1.245				
	.20	100	"	1.232				
	.40	120	"	1.22	87	76.5		
	5.00	140	"	1.21				
	.20	160	"	1.20				
	.40	180	"	1.19	90	77		
	6.00	200	"	1.18				
	.20	220	"	1.17				
	.40	240	"	1.16	92.5	77		
	7.00	260	"	1.147				
	.20	280	"	1.132				

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
1/23/09	PM 7.40	300	30	1.117	94.7	77	
	8.00	320	"	1.102			
	.20	340	"	1.077			
	.30	350	"	1.06			
	.40	360	"	1.032			
	.45	365	"	1.017			
	.50	370	"	1.005			
	.52	372	"	1.00	975	77	-186

Stood Idle over Sunday, 27 hrs.

Charge #30

1/24/09	PM 11.30	0	20		67.5	67.2	
1/25	AM 12.30	60	"		71.7	68.5	
	1.30	120	"		73.5	69.2	
	2.30	180	"		74.7	69.7	
	3.30	240	"		74.5	70.5	
	4.30	300	"		77.7	71.2	
	5.30	360	"		80	72.5	
	6.30	420	"		80.2	73	
	7.30	480	"		80.7	73	
	8.30	540	"		79.5	71.5	
	9.30	600	"		80.2	72.5	
	10.00	630	"	1.797			-10½ hrs. @ 20
					(76.7)		

Discharge #30

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
1/25/09	AM 10.03	—	open	1.58	81	72.5	
	10.05	0	30	1.487			
	07	2	"	1.415			
	10	5	"	1.38			
	15	10	"	1.357			
	25	20	"	1.335			
	35	30	"	1307			
	45	40	"	1.297			
	11.05	60	"	1.275	83.7	725	
	25	80	"	1.262			
	.45	100	"	1.242			
	12.05	120	"	1.232	85.7	725	
	25	140	"	1.22			
	45	160	"	1.21			
	1.05	180	"	1.20	86.2	73	
	25	200	"	1.19			
	45	220	"	1.18			
	2.05	240	"	1.17	88	73	
	25	260	"	1.158			
	45	280	"	1.14			
	3.05	300	"	1.127	895	725	
	25	320	"	1.10			
	45	340	"	1.072			
	55	350	"	1.057			
	4.05	360	"	1.022	922		
	15	370	"	1.00	93	73	-185

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
		Charge #31				
1/25/09	PM 4 30	0	20	1.35	93	73
	.32	2	"	1.41		
	.35	5	"	1.425		
	.40	10	"	1.452		
	.50	20	"	1.49		
	5 00	30	"	1.53	92	73
	10	40	"	1.545		
	.30	60	"	1.61	90.2	73
	50	80	"	1.63		
	6.00	90	"		892	73
	10	100	"	1.632		
	30	120	"	1.622	887	73
	50	140	"	1.617		
	7.00	150	"		875	73
	10	160	"	1.617		
	30	180	"	1.622	86.5	735
	50	200	"	1.622		
	8.00	210	"		86	737
	10	220	"	1.62		
	30	240	"	162	855	74
	50	260	"	1.62		
	9.00	270	"		85	74
	10	280	"	1.62		
	.30	300	"	1.625	847	745

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
1/25/09	PM 950	320	20	1632			
	10 00	330	"		845	75	
	10	340	"	1637			
	30	360	"	1.645	84	752	
	50	380	"	1.65			
	11.00	390	"		82.5	75.5	
	.10	400	"	167			
	.30	420	"	167.5	82.2	75.2	
	.50	440	"	169			
1/26	AM 12.00	450	"		82.7	76	
	.10	460	"	169			
	.30	480	"	170.5	81	75	
	.50	500	"	171.7			
	1.00	510	"		80	73.5	
	.10	520	"	173			
	.30	540	"	174.2	80.5	73.7	
	.50	560	"	175.7			
	2.00	570	"		81.5	74.2	
	.10	580	"	177.7			
	.30	600	"	179	82	745	
	.50	620	"	179.7			
	3.00	630	"	180	82.2	74.5	= 10½ hrs. @ 20
					(85.1)		

DATE	TIME	MIN	AMPS	VOLT	TEMPS	
				398	398	Idle
1/26/09			Discharge			#31
	AM 3.03	0	open	159		
	.05	0	30	149		
	.07	2	"	142		
	.10	5	"	138.2		
	.15	10	"	136		
	.25	20	"	133		
	.35	30	"	131	82.5	73.7
	.45	40	"	130		
	4.05	60	"	127	82.5	73
	.25	80	"	125.7		
	.35	90	"		83.5	72.2
	.45	100	"	124.2		
	5.05	120	"	123	84.5	72.7
	.25	140	"	122		
	.35	150	"	1[illegible]	85.2	73
	.45	160	"	121		
	6.05	180	"	120	86.2	73
	.25	200	"	119		
	.35	210	"		88	73
	.45	220	"	118		
	7.00	240	"	117	89.2	73
	.25	260	"	116		
	.35	270	"		90.7	73.5
	.45	281	"	114.5		

DATE	TIME	MIN	AMPS	VOLTS	TEMPS		
				398	398	Idle	
1/26/09	AM 8.05	300	30	113	91	73.5	
	.25	320	"	111			
	.35	330	"		91	73	
	.45	340	"	1.09			
	.55	350	"	1.065			
	9.05	360	"	1.04	91.5	73	
	.10	365	"	1.022			
	.15	370	"	1.01			
	.19	374	"	1.00			-187

					VOLTS TO NiO2		TEMP		
				398	Fe	Ni	398	Idle	
			Charge		#32				Electrode #5
1/26	AM. 9.35	0	20	1.37	1.392	-.025	93	20 73	
	.37	2	"	1.417	1.402	-.015			205p.=60lb 1 " = 3 "
	.40	5	"	1.431	1.41	.005			
	.45	10	"	1.452	1.42	.015			
	.55	20	"	1.491	1.44	.037			
	10.05	30	"	1.53	1.459	.05	91.5	17.5 73	
	.15	40	"	1.56	1.476	.062			
	.35	60	"	1.602	1.492	.081	90	17 73	
	.55	80	"	1.63	1.511	.095			
	11.05	90	"				89	16 73	
	.15	100	"	1.63	1.506	.10			
	.35	120	"	1.624	1.501	.103	87.7	14.5 73.2	

DATE	TIME	MIN	AMPS	VOLTS	VOLTS TO NiO2		TEMP	
				398	Fe	Ni	398	Idle
1/26/09	AM 11.55	140	20	1.625	1.49	.11		
	1216	161	"	1.625	1.491	.11	86.7	13.2 73.5
	.35	180	"	1.629	1.487	.116	85.7	13.2 73.5
	.55	200	"	1.63	1.422	.122		
	1.05	210	"				85	11 74
	15	220	"	1.625	1.483	.125		
	.35	240	"	1.63	1.473	.13	84.5	10.5 74
	.55	260	"	1.636	1.473	.132		
	2.05	270	"				84	9 75
	.15	280	"	1.633	1.471	.138		
	.35	300	"	1.635	1.47	.14	83.7	9.0 74.7
	.55	320	"	1.64	1.467	.145		
	3.15	340	"	1.643	1.465	.152	83.5	8.5 75
	.35	360	"	1.648	1.47	.158		
	55	380	"	1.652	1.47	.162	83.5	7.5 76
	4.05	390	"				83.5	7.5 76
	.15	400	"	1.66	1.482	.17		
	35	420	"	1.67	1.483	.175	84	8 76
	55	440	"	1.672	1.486	.18		
	5.05	450	"				84.2	8.2 76
	.15	460	"	1.68	1.49	.185		
	.35	480	"	1.693	1.491	.19	83.2	7.2 76
	.55	500	"	1.705	1.50	.193		
	6.05	510	"				83.2	7.2 76
	.15	520	"	1.718	1.505	.20		

DATE	TIME	MIN	AMPS	VOLTS	VOLTS TO Ni O2		TEMP		
				398	Fe	Ni	398	Idle	
1-26-09	P.M. 6.35	540	20	1.732	1.512	.202	83.5	7.5 76	
	.55	560	"	1.752	1.53	.205			
	7.05	570	"				83.5	7.5 76	
	.15	580	"	1.773	1.545	.215			
	.35	600	"	1.782	1.56	.215	84.2	8.0 76.2	
	.55	620	"	1.79	1.565	.212			
	8.05	620	"	1.792 al. X	1.567	.212	85	8.8 76.2	-10½ @20
				Discharge #32			(85.5) al.		
1-26-09	P.M. 8.08	-	open	1.575					
	.10	0	30	1.49					
	.12	2	"	1.405					
	.15	5	"	1.37					
	.20	10	"	1.347					
	.30	20	"	1.322					
	.40	30	"	1.30					
	.50	40	"	1.295					
	9.10	60	"	1.27	87.5	76.5			
	.30	80	"	1.252					
	.50	100	"	1.237					
	10.10	120	"	1.222	89	76.5			
	.30	140	"	1.212					
	.50	160	"	1.205					
	11.10	180	"	1.20	90.5	76.7			
	.30	200	"	119					
	.50	220	"	118.1					

DATE	TIME	MIN.	AMP	VOLTS	TEMP		
				398	398	Idle	
1/27/09	AM 12.10	240	30	116.5	97.7	77.2	
	.30	260	"	116			
	.50	280	"	114.2			
	1.10	300	"	112.5	94	77.2	
	.30	320	"	110.1			
	.40	330	"	109.5			
	.50	340	"	107.7			
	2.00	350	"	106.2			
	.10	360	"	103	96	77	
	.20	370	"	101.5			
	.22	372		100			-186

Charge #33

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	Idle
1/27	AM 2.30	0	30	139	95.5	76.5
	.32	2	"	143.7		
	.35	5	"	146.2		
	.40	10	"	150.2		
	.50	20	"	157		
	3.00	30	"	158.7		
	.10	40	"	160.5		
	.30	60	"	162.7	93.7	76
	.50	80	"	165		
	4.10	100	"	165		

DATE	TIME	MIN	AMPS	VOLTS	TEMPS		
				398	398	Idle	
1/27/09	AM 4.30	120	30	165	91.5	75.5	
	.50	140	"	165.7			
	5.10	160	"	165			
	.30	180	"	167	89	74	
	.50	200	"	167.7			
	6.10	220	"	168.2			
	.30	240	"	169	88.7	75	
	.50	260	"	169.5			
	7.10	280	"	170.2			
	.30	300	"	171.5	88	75	
	.50	320	"	172.5			
	8.10	340	"	1.737			
	.30	360	"	1.76	87.5	74	
	.50	380	"	1.79			
	9.10	400	"	1.82			
	.30	420	"	1.832	88 90.2	73.7	- 7 hrs. @ 30

Discharge #33

DATE	TIME	MIN	AMPS	VOLTS
27	AM 9.33	—	open	1.59
	9.35	0	30	1.50
	.37	2	"	1.422
	.40	5	"	1.39
	.45	10	"	1.37
	.55	20	"	1.337
	10.07	32	"	1.317

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
1/27/09	AM 1015	40	30	1.302			
	.35	60	"	1.277	88.7	73.7	
	.55	80	"	1.257			
	11.15	100	"	1.247			
	35	120	"	1.232	88.2	74	
	55	140	"	1.22			
	P.M. 12.15	160	"	1.21			
	.35	180	"	1.20	87.7	73	
	.55	200	"	1.195			
	1.15	220	"	1.177			
	.35	240	"	1165	89.5	73.2	
	.55	260	"	1.152			
	2.15	280	"	1.137			
	.35	300	"	1.117	91	73.2	
	.55	320	"	1.095			
	3.15	340	"	1.062			
	.35	360	"	1.017	93.7	73.2	
	.39	364	"	1.00			-182

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle
				Charge #34		
1-27-09	P.M. 3:50	0	30	1.37	96	73.2
	.52	2	"	1.427		
	.55	5	"	1.462		
	4.00	10	"	1.50		
	.10	20	"	1.565		
	.20	30	"	1.607		
	.30	40	"	1.64		
	.50	60	"	1.658	94.2	73.5
	5.10	80	"	1.655		
	.30	100	"	1655		
	.50	120	"	1.65	91.5	73.7
	6.10	140	"	1.655		
	.30	160	"	1.66		
	.50	180	"	166	90.2	74
	7.10	200	"	1.67		
	.30	220	"	1.677		
	.50	240	"	1695	89	74.2
	8.10	260	"	1.695		
	.30	280	"	1.702		
	.50	300	"	1.72	88.5	74.5
	9.10	320	"	1.73		
	.30	340	"	1.745		
	.50	360	"	1.775	88.5	74.7
	10.10	380	"	1.80		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP. 398	TEMP. Idle
1-27-09	P.M. 10.30	400	20	1.225		
	.50	420	"	1.23	89	74.5
					90.8	

Discharge #34

1-27-09	P.M. 10.53	—	open	1.585		
	.55	0	20	1.50		
	.57	2	"	1.44		
	11.00	5	"	139.7		
	.05	10	"	137		
	.15	20	"	134.1		
	.25	30	"	132.2		
	.35	40	"	130.8		
	.55	60	"	127.1	90	74.2
1/28	A.M. 12.15	80	"	126.1		
	.35	100	"	124.8		
	.55	120	"	123.5	91	75
	1.15	140	"	122.1		
	.35	160	"	121.7		
	.55	180	"	120.1	91.2	75.5
	2.15	200	"	119.7		
	.35	220	"	118.3		
	.55	240	"	117	91.5	75
	3.15	260	"	116		
	.35	280	"	115		
	.55	300	"	112.6	93.5	75.2

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
1/28/09	AM 4.05	310	30	111.7			
	.15	320	"	111			
	.25	330	"	109.9			
	.35	340	"	108			
	.45	350	"	106			
	.55	360	"	103.1	95.5	76	
	5.05	370	"	100.7			
	.07	372	"	100	95.7	76	-186

Charge

					Fe	Ni +	TEMPS 3.5	21.5	Electrode -5
1/28	AM 5.20	0	30	140	140.5	-.02	97.5	76	
	.22	2	"	144.7	142.1	.002			
	.25	5	"	146.7	143	.014			
	.30	10	"	150.7	145	.036			
	.40	20	"	156.1	147.1	.061		19.5	
	.50	30	"	160.5	149.5	.081	95.5	76	
	6.00	40	"	164	151.7	.099		18	
	.10	50	"				94	76	
	.20	60	"	165.8	151.1	.11		17.5	
	.40	80	"	165	149	.119	93	75.5	
	7.00	100	"	165	148.5	.127		16.5	
	.10	110	"	1			92.5	76	
	.20	120	"	165	147.7	.130			

DATE	TIME	MIN	AMPS	VOLTS 398	Fe	Ni	Temps 398	Idle
1/28/09	AM 7.40	140	30	1.659	14.7	14.1	89.5	14.5 75
	800	160	"	1.663	1.477	.155		
	.20	180	"	1.671	1.477	.163	87.2	13.7 73.5
	.40	200	"	168	1477	.17		
	.50	210	"	1.69	1.499	.181	85.7	12.2 73.5
	9.00	220	"	169	1.499	.181		
	20	240	"	1.697	1.41	.192 Electrode was not immersed properly		
	24	244	"	1.698	1.492	.19	85	73.5 11.5
	.40	260	"	1.708	1.498	.197		
	50	270	"				84.5	11.0 73.5
	1000	280	"	1.716	1.498	.202		
	20	300	"	1.725	1.505	.21	84.5	1.0 73.5
	40	320	"	1.74	1.512	.215		
	50	330	"				85	11.5 73.5
	11.00	340	"	1.758	1.527	.22		
	20	360	"	1.782	1.542	.225	85.5	12.0 73.5
	40	380	"	1.81	1.57	.232		
	50	390	"				86.5	12.8 73.7
	1200	400	"	1.83	1.585	.235		
	20	420	"	1.831	1.59	.237	87.2	13.2 74
				ok x	ok	ok		ok
							88.9	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Idle
	PM	Discharge #35				
1/28/09	1223	—	open	1.59		
	25	0	30	1.50		
	27	2	"	1.422		
	.30	5	"	1.385		
	.35	10	"	1.37		
	.45	20	"	1.34		
	.55	30	"	1.32		
	1.05	40	"	1.307		
	.25	60	"	1.285	88	74.2
	.45	80	"	1.26		
	2.05	100	"	1.245		
	.25	120	"	1.232	88.5	74
	.45	140	"	1.22		
	3.05	160	"	1.21		
	.25	180	"	1.20	89.7	75.5
	.45	200	"	1.19		
	4.05	220	"	1.177		
	.25	240	"	1.167	91.5	76.2
	.45	260	"	1.157		
	5.05	280	"	1.14		
	.25	300	"	1.122	94	76.5
	.45	320	"	1.10		
	6.05	340	"	1.065		
	.25	360	"	1.02	96.5	76.7

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle	
1-28-09	P.M. 6,30	365	30	1.00 f.o.x			-182.5
				Charge #36			
1-28-09	P.M. 6,35	0	40	1,32	96	77	
	.37	2	"	1,47			
	.40	5	"	1,512			
	.45	10	"	1,56			
	.55	20	"	1,62	97.2	77	
	7.05	30	"	1.66			
	.15	40	"	1,675	99	77	
	.35	60	"	1.665	99	77	
	.55	80	"	1.67	98.7	77.2	
	8.15	100	"	1.675	98.2	77.2	
	.35	120	"	1.68	97	77.2	
	.55	140	"	1.687			
	9.15	160	"	1.692	96.7	77.5	
	.35	180	"	1.70		-	
	.55	200	"	1.712	96.5	77.7	
	10.15	220	"	1.725			
	.35	240	"	1.74	96.5	78	
	.55	260	"	1.76	97	78	
	11.15	280	"	1.795	97.5	78	
	.35	300	"	1.827	98.2	78	
	.50	315	"	1.84	98.5	78	-5 1/4 hrs. @ 40
					97.4		

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle
				Discharge #36		
1-29-09	P.M. 11,53	-	open	1,595		
	.55	0	30	1,50		
	.57	2	"	1,425		
	12.00	5	"	1,385		
	.05	10	"	1,377		
	.15	20	"	1,345	98	78
	.25	30	"	1,33		
	.35	40	"	1,307		
	.55	60	"	129	98	78
	1.15	80	"	1,263	97.7	79
	.35	100	"	1,245	97.5	80
	.55	120	"	123.5	97.2	80
	2.15	140	"	122.2	97	80
	.35	160	"	121	97	80
	.55	180	"	120.1	96.7	80
	3.15	200	"	119	96.7	80
	.35	220	"	118	96.7	80
	.55	240	"	117	96.5	80
	4.15	260	"	115.9	96.5	80
	.35	280	"	114.2	96.7	79.7
	.55	300	"	112.5	97	79.7
	5.15	320	"	109.7	97.5	79.5
	.25	330	"	107.7		
	.35	340	"	106	97.7	78.2

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	Idle	
1/29/09	AM 5.45	250	30	103			
	.55	300	"	1.697	98	79.2	
	6.00	305		[illegible]	98	79.2	-182.5

Charge 37

DATE	TIME	MIN	AMPS	VOLTS	398	Idle
1/29	AM 6.15	0	40	147	101	79.2
	.17	2	"	147		
	.20	5	"	151		
	.25	11	"	156		
	.30	20	"	164	99.7	78.2
	.40	30	"	167		
	.55	40	"	167.5	99.2	78
	7.15	60	"	167	98.5	78
	.35	80	"	167	98	78.5
	.55	100	"	167	97.5	78.7
	8.15	120	"	1.677	97	78.7
	.35	140	"	1.69	96.7	78.7
	.55	160	"	1.697	96.2	79
	9.15	180	"	1.70	96.2	79
	.35	200	"	1.71		
	.55	220	"	1.725	96	79
	10.15	240	"	1.74		
	.35	260	"	1.76	96.2	79

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Idle
1/29/09	AM 10.55	280	40	1.795	96.5	78.7
	11.15	300	"	1.837	97	78.7
	.30	315	"	1.847	.975 97.5	78.7

Discharge #37

DATE	TIME	MIN	AMPS	VOLTS	398	Idle
1/29	AM 11.33	—	open	1.58		
	35	0	30	1.50		
	37	2	"	1.412		
	40	5	"	1.39		
	45	10	"	1.37		
	55	20	"	1.345	96.5	78.5
	12.05	30	"	1.325		
	.15	40	"	1.31	96	78.5
	.35	60	"	1.285	96	78.5
	.55	80	"	1.267	96	78.5
	1.15	100	"	1.25	95.5	78.5
	.35	120	"	1.24	94.7	78.5
	.55	140	"	1.22	94.5	78.2
	2.15	160	"	1.215	94	78
	.35	180	"	1.20	93.8	78
	.55	200	"	1.185	93.5	78
	3.15	220	"	1.18	93.2	78
	.35	240	"	1.165	93.5	78
	.55	260	"	1.155	93.5	77.7
	4.15	280	"	1.14	94	77.5

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle	
1-29-09	P.M. 4.35	300	30	1.117	94.5	77.5	
	.55	320	"	1.095	94.7	77.5	
	5.15	340	"	1.027	95	77.5	
	.20	345	"	1.017			
	.25	350	"	1.00	96	77.3	-175

Charge #38

Electrode No. #5

DATE	TIME	MIN.	AMP	Cell	Fe	Ni.		TEMP		
1-29-09	PM 5.45	0	40	1.44	1.43	.01	20.3	97.5	77.2	
	.47	2	"	1.497	1.462	.037				40 Sp. = 60 m. 1 " = 1½ "
	.50	5	"	1.54	1.47	.06,				
	.55	10	"	1.62	1.492	.08				
	6.05	20	"	1.64	1.522	.107	20.3	97.5	77.2	
	.15	30	"	1.672	1.645	.125				
	.25	40	"	1.68	1.545	.132	20.	97	77	
	.45	60	"	1.67	1.525	.142	20.	97	77	
	7.05	80	"	16.7	1.51	.15.4	18.5	96.5	78	
	.25	100	"	167.3	150.3	.16.1	17.7	94.7	78	
	.45	120	"	168	150	.17.2	17.3	95.5	78.2	
	8.05	140	"	169	149.8	.18.2	16.5	95	78.5	
	.25	160	"	169.8	149.9	.19.1	16.2	94.7	78.5	
	.45	180	"	171	149.8	.20.1	16.3	94.5	78.2	
	9.05	200	"	172.1	150	.21.2	15.5	94.2	78.5	
	.25	220	"	173.6	150.7	.22	16.2	94.2	78	
	.45	240	"	175.8	152	.22.8	15.2	94.2	78	
	10.05	240	"	178.8	154.8	.23.5	16.5	94.5	78	

DATE	TIME	MIN.	AMP	VOLTS #398	Fe	Ni	TEMPS 398		TEMPS Idle
1/29/09	PM 10.25	280	40	182.3	157.4	.23.9	95.5	17.5	78
"	.45	300		184.8	159.7	.24	96	18	78
	11.00	315		$\boxed{183}$ av.	159.9	.24.1	95.7		
							$\boxed{95.6}$		av.

Discharge #38

DATE	TIME	MIN.	AMP	VOLTS #398	Fe	Ni	TEMPS 398	TEMPS Idle
1/29	AM 11.03	—	open					
	.05	0	30	149	137	.12.2	95.5	78
	.07	2	"	142	133	.08		
	.10	5	"	139	131.3	.06.9		
	.15	10		137	130.8	.05.5		
	.25	20	"	134.9	130	.03.9	95.5	78
	.35	30	"	132.3	129.7	.02		
	.45	40	"	131	129.2	.00.9	95.5	78
1/30	AM 12.05	60	"	128.2	129	−.01.5	95	78.2
	.25	80	"	126.3	129	−.03	95	78.2
	.45	100	"	124.9	128.8	−.04.8	94.7	78.7
	1.05	170	"	123.4	128.5	−.05.9	94.7	78.5
	.25	140	"	122.1	128.3	−.06.9	94.5	78.5
	.45	160	"	121.2	128.2	−.07.9	94.5	79
	2.05	180	"	120.3	128.2	−.08.5	94.2	79
	.25	200	"	119.1	128	−.09.5	94	79
	.45	220	"	118.1	127.9	−.10.3	94	79
	3.05	240	"	117	127.9	−.11.5	94.2	79
	.25	260	"	115.8	127.1	−.12.6	94.2	79
	.45	280	"	113.9	127	−.14	94.6	79

DATE	TIME	MIN	AMPS	VOLTS 398	Fe	Ni	TEMPS 398	Idle	
1/30/09	AM 4.05	300	30	111.9	126.6	-.15.8	94.5	78.5	
	.15	310	"	110.7	126.2	-.17			
	.25	320	"	108.9	126.1	-.18	95	78.5	
	.35	330	"	106.8	126	-.20			
	.45	340	"	104.2	125.9	-.22.1	98	78.2	
	.55	350	"	101	125.5	-.26.5			.1
	.57½	352½	"	100	125.5	-.26.1	95.2	78	-176.2

Stood 45 o.c. hrs over Sunday

DATE	TIME	MIN	AMPS	VOLTS	TEMPS 398	Idle
2/1		Charge 39				
	AM 2.00	0	50	163	71.2	72
	.02	2	"	171		
	.05	5	"	175		
	.10	10	"	177.8		
	.20	20	"	177.9	76	72.2
	.30	30	"	176.5		
	.40	40	"	175.7	80	76.5
	.50	50	"	175.1		
	3.00	60	"	175	82	73
	.10	70	"	175		
	.20	80	"	175	84.2	73
	.30	90	"	175.1		
	.40	100	"	175.1	86	73.2
	.50	110	"	175.7		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	Idle	
2/1/09	AM 4.00	120	50	175.9	88	73.5	
	.10	130	"	175.9			
	.20	140	"	176	89.5	73.5	
	.30	150	"	176.1			
	.40	160	"	176.5	91.5	73.5	
	.50	170	"	177			
	5.00	180	"	177.5	92.2	73.5	
	.10	190	"	178.5			
	.20	200	"	179.9	93.5	73.5	
	.30	210	"	181.9			
	.40	220	"	184	95	73.7	
	.50	230	"	186			
	6.00	240	"	187	96.7	73.7	
	.06	246	"	187.5			add H
	.12	252	"	187	(87)		-4⅕ hrs. @ 50
		stood 8 min					
		Discharge					39
	AM 6.18	-	open	157	96.5	74	
	.20	0	30	148.2			
	.22	2	"	141.8			
	.25	5	"	139			
	.30	10	"	136.2			
	.40	20	"	134.2			
	.50	30	"	132.1			
	7.00	40	"	130.9			

107

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Idle	
2/1/09	AM 7.20	60	30	128	94	73.5	
	:40	80	"	126.1			
	8.00	100	"	124.1			
	.20	120	"	1.232	91.5	73	
	.40	140	"	1.22			
	9.00	160	"	121			
	.20	180	"	1.20	92	74.5	
	.40	200	"	1.19			
	10.00	220	"	1.18			
	20	240	"	1.17	92.2	74.5	
	40	260	"	1.16			
	11.00	280	"	1.145			
	.20	300	"	1.112	93.5	75	
	.40	320	"	1.065			
	45	325	"	1.05			
	.50	330	"	1.031			
	.55	335	"	1.012			
	.57½	337½	"	1.00	94.5	75.2	−168.7
			Charge	#40			
2/1/09	PM 12.20	0	50	1.47	96	75.5	
	22	2	"	1.55			
	25	5	"	1.595			
	.30	10	"	1.64			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Idle	
2/1/09	PM 12.40	20	50	1.68	96.	75.5	
	50	30	"	1.71			
	1.00	40	"	1.705	96.2	75.5	
	.10	50	"	1.697			
	.20	60	"	1.697	96.5	75.5	
	30	70	"	1.697			
	.40	80	"	1.705	96.5	75.5	
	50	90	"	1.71			
	2.00	100	"	1.717	96.5	75.7	
	10	110	"	1.727			
	20	120	"	1.73	96.7	76	
	.30	130	"	1.732			
	.40	140	"	1.73	97.2	76.5	
	50	150	"	1.74			
	3.00	160	"	1.75	97.5	76.5	
	.10	170	"	1.76			
	.20	180	"	1.77	98.5	76.5	
	.30	190	"	1.78			
	.40	200	"	1.795	99.5	77	
	.50	210	"	1.83			
	4.00	220	"	1.85	101	77	
	10	230	"	1.867			
	20	240	"	1.87	102.5	77	
	30	250	"	1.872			98.1 Ans
	32	252	"	1.872	103	77	= 4⅕ @ 50

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
			Discharge			#40	
2/1/09	PM 4.38	—	open	1.562			
	4 40	0	30	1.49			
	42	2	"	1.417			
	45	5	"	1.39			
	50	1.0	"	1.375			
	5.00	20	"	1.35	101.2	77.5	
	.10	30	"	1.33			
	.20	40	"	1.31			
	.40	60	"	1.287	99.5	77	
	6.00	80	"	1.262			
	.20	100	"	1.25			
	.40	120	"	1.227	97.5	77	
	7.00	140	"	1.225			
	.20	160	"	1.212			
	.40	180	"	1.20	96	77.7	
	8.00	200	"	1.192			
	.20	220	"	1.18			
	.40	240	"	1.173	95	78.5	
	9.00	260	"	1.157			
	.20	280	"	1.137			
	.40	300	"	1.113	95.7	78.5	
	10.00	320	"	1.075			
	.10	330	"	1.04			
	.20	340	"	1.013			

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle				
2-1-09	P.M. 10.22	342	30	1.00	96	78				-171
				Cell	Fe	Ni.	TEMP. 389		Idle	
				Charge	#41					Electrode # 6
2-1-09	P.M. 10.40	0	50	1.425	1.40	.02	96	15	78	50 Sp. = 60 Ty
	.42	2	"	1.555	1.445	.082				1 " = 1 1/5 "
	.45	5	"	1.585	1.48	.097				1 Ty. = 5/6 Sp.
	.50	10	"	1.655	1.525	.125				2 " = 1 2/3 " 5 " = 4 1/6 "
	11.00	20	"	1.70	1.545	.142	98.2	20.5	77.7	10 " = 8 1/3 "
	.10	30	"	170.3	154.5	.15				
	.20	40	"	169.9	153.1	.159	99	21	78	
	.30	50	"	169.5	152	.165				
	.40	60	"	169.8	151.6	17.4	98.5	20.5	78	
	.50	70	"	169.7	150.9	.18				
2/2	AM 12.00	80	"	170	150.2	.186	98	20	78	
	.10	90	"	170.7	150.2	.194				
	.20	100	"	171	150	.20	98	20.5	77.5	
	.30	110	"	171.7	150	.202				
	.40	120	"	172.1	150	.211	97.5	20.3	77.2	
	.50	130	"	172.5	150	.216				
	1.00	140	"	173.4	150.1	.221	97.5	20.5	77	
	.10	150	"	173.9	150.2	.223				
	.20	160	"	174.8	150.9	.23	97	20.8	76.2	
	.30	170	"	175.9	151.4	.231				
	.40	180	"	176.8	152	.237	97	21	76	
	.50	190	"	178	153	.24				

DATE	TIME	MIN	AMPS	VOLTS 398	75	76	TEMPS 398	Idle
2/2/09	PM 2.00	200	50	180.1	154.9	.24.6	97.5	21.8 75.7
	.10	210	"	182.9	157	.25		
	.20	220	"	185.3	159.6	.25	99	23 76
	.30	230	"	186.4	160.3	.25		
	.40	240	"	187	161	.25.1	100.7	24.5 76.2
	.50	250	"	187.3	161.2	.25.1		
	.52	252	"	187.5 off	161.1 TEMPS 398 off	.25 Idle	98.3 f.	

Discharge 41

DATE	TIME	MIN	AMPS	VOLTS				
2/2	AM 2.58	—	o/c	157	1.00	.76		
	3.00	0	30	149				
	.02	2	"	142				
	.05	5	"	139.2				
	.10	10	"	137				
	.20	20	"	134.2				
	.30	30	"	133				
	.40	40	"	131				
	4.00	60	"	128.2	97.5	76		
	.20	80	"	126.5				
	.40	100	"	124.7				
	5.00	120	"	123	94	75.2		
	.20	140	"	122				
	.40	160	"	121				
	6.00	180	"	120	93	75.5		
	.20	200	"	119				

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	Idle	
2/2/09	PM 6.40	220	30	117.7			
	7.00	240	"	117	92.2	75.5	
	.20	260	"	115.7			
	.40	280	"	113			
	8.00	300	"	111.5	95	76.5	
	.20	320	"	10.8			
	30	330	"	1.057			
	35	335	"	104			
	40	340	"	1.017			
	45	345	"	1.00 off	96.5	76.5	-172.5

Charge #42

DATE	TIME	MIN	AMPS	VOLTS	TEMPS		
2/2/09	AM 9.05	0	60	1.50	97	76.5	
	06	1	"	1.557			
	07	2	"	1.582			
	08	3	"	1.597			
	09	4	"	1.607			
	1.0	5	"	1.625			
	12	7	"	1.65			
	15	10	"	1.677			
	20	15	"	1.705			
	25	20	"	1.73	98.7	76	
	35	30	"	1.725			
	45	40	"	1.717	99.5	75.7	

DATE	TIME	MIN	AMPS	VOLTS	TEMP		
				398	398	Idle	
	AM						
2/2/09	9.55	50	60	1.717			
	1005	60	"	1.72	1.00	75.7	
	15	70	"	1.72			
	.25	80	"	1.725	1005	75.7	
	.35	90	"	1.732			
	.45	100	"	1.742	1007	76	
	.55	110	"	1.75			
	11.05	120	"	1.76	101	76	
	.15	130	"	1.77			
	.25	140	"	1.775	1.01	76	
	.35	150	"	1.797			
	.45	160	"	1.817	1.015	76	
	.55	170	"	1.84			
	12.05	180	"	1.87	1.02	75.7	
	.15	190	"	1.882			
	25	200	"	1.897	1.035	75.5	
	35	210	"	1.902	1.042	75.5	−3½ hrs. @ 60
					100.6		
				Discharge 42			
	PM						
2/2	1238	—	open	1.58	1.04	75.5	
	1240	0	30	1.50			
	42	2	"	1.425			
	45	5	"	1.405			
	50	10	"	1.382			
	1.00	20	"	1.36	1022	75.5	

DATE	TIME	MIN	AMPS	VOLTS	TEMP		
				398	398	Idle	
	PM						
2/2/09	1.10	30	30	1.34			
	.20	40	"	1.32			
	.40	60	"	1.29	1002	75.5	
	2.00	80	"	1.27			
	.20	100	"	1.255			
	.40	120	"	1.24	97	75.5	
	3.00	140	"	1.222			
	.20	160	"	1.217			
	.40	180	"	1.20	.93	76	
	4.00	200	"	1.187			
	.20	220	"	1.18			
	.40	240	"	1.173	94	76	
	5.00	260	"	1.157			
	.20	280	"	1.133			
	.40	300	"	1.105	95	76	
	6.00	320	"	1.057			
	.14½	3.24½	"	1.00	95	76	−167.2

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 Idle
		Charge #43				
	A.M.					
2-2-09	6.30	0	60	1.48	94.5	76
	.31	1	"	1.535		
	.32	2	"	1.565		
	.33	3	"	1.58		
	.34	4	"	1.592		
	.35	5	"	1.607		
	.37	7	"	1625		
	.40	10	"	1.652		
	.45	15	"	1.70		
	.50	20	"	1.725	99	76.2
	7.00	30	"	1.72		
	.10	40	"	1.72	99.5	76
	.20	50	"	1.72		
	.30	60	"	1.72	99.2	75.7
	.40	70	"	1.722		
	.50	80	"	1.73	99.5	75.5
	8.00	90	"	1.74		
	.10	100	"	1.742	100	75.2
	.20	110	"	1.747		
	.30	120	"	1.752	101	75
	.40	130	"	1.755		
	.50	140	"	1.762	102	75
	9.00	150	"	1.785		
	.10	160	"	1.805	102.7	75

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	 Idle	
2-2-09	9.20	170	60	1.835			
	.30	180	"	1.87	103.7	75	
	.40	190	"	1.882			
	.50	200	"	1.885	106	75	
	10.00	210	"	1.887	106.5	75	-3½ hrs. @ 60
				Discharge #43	(100.7)		
	P.M.						
2-2-09	10.03	-	open	1.58			
	.05	0	30	1.502			
	.07	2	"	1.44			
	.10	5	"	1.402			
	.15	10	"	1.395			
	.25	20	"	1.357	1.04	75	
	.35	30	"	1.335			
	.45	40	"	1.32	1.025	75	
	11.05	60	"	129	102	75.2	
	.25	80	"	127			
	.45	100	"	125.2			
	12.05	120	"	123.7	99.5	77	
	.25	140	"	122.5			
	.45	160	"	121.5			
	1.05	180	"	120	98	78.7	
	.25	200	"	119			
	.45	220	"	118.1			
	2.05	240	"	117	96.7	78	
	.25	260	"	115.5			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	Idle	
2/3/29	AM 2.45	280	30	113.5			
	3.05	300	"	111	97	78	
	.25	320	"	106.2			
	.35	330	"	103			
	.43½	338½	"	100	98	78	–169.2

					Fe	Ni	TEMPS	
2/3		Charge			+ 44			
	AM 4.00	0	60	150	144	.05	91.5	23.5 78
	.01	1	"	156.5	145	.09.9		
	.02	2	"	157	146	.09.1		
	.03	3	"	159	147	.10.2		
	.04	4	"	160.1	147.3	.11		
	.05	5	"	161.9	148.2	.12		
	.07	7	"	164.2	149.4	.13.2		
	.10	10	"	167.7	151.2	.14.7		
	.15	15	"	170.9	153.7	.15.8		
	.20	20	"	172.2	154	.16.2	100.2	22.2 78
	.30	30	"	172	153	.17		
	.40	40	"	171.1	151.5	.18	101.5	22.5 79
	.50	50	"	171.4	150.9	.18.7		
	5.00	60	"	171.9	150.2	.19.9	102	22.8 79.2
	.10	70	"	172.1	149	.20.1		
	.20	80	"	172.9	149	.21	102	22.5 79.5

DATE	TIME	MIN	AMP	VOLTS 398	Fe	Ni	TEMPS 398	Idle	
2/3/29	5.30	90	60	173.4	148.5	.21.5		23.5	
	.40	100	"	174	148.6	.22.1	102.7	79.2	
	.50	110	"	174.2	150.1	.22.7			
	6.00	120	"	175.5	151	.23	103.2	23.9 79.5	
	.10	130	"	175.5	150.9	.23.1			
	.20	140	"	176.5	151.7	.23.5	104	24.5 79.5	
	.30	150	"	178.1	153	.23.9			
	.40	160	"	180	154.7	.24	104.5	25.0 79.5	
	.50	170	"	183	156.5	.24			
	7.00	180	"	186	159.4	.24	105.5	26.0 79.5	
	.10	190	"	187.8	161	.24.1		27.0	
	.20	200	"	188.6	161	.24.1	106.5	79.5	
	.30	210	"	188.3 afn +	161	.24	106.5 (101.9)	27.0 79.5 af.	–3½ @60
				Discharge			+ 44		
2/3	AM 7.33	–	Open	157					
	.35	0	3.0	149					
	.37	2	"	142					
	.40	5	"	139					
	.45	10	"	137					
	.55	20	"	134.5					
	8.05	30	"	132.5	102.5	79.5	?		
	.15	40	"	131					
	.35	60	"	128.5	108	79.2			
	.50	80	"	126					

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
2/3/09	AM 9.15	100	30	1.247			
	.35	120	"	1.23	96	78.5	
	55	140	"	1.217			
	10.15	160	"	1.205			
	.35	180	"	1.195	92	77	
	.55	200	"	1.187			
	11.15	220	"	1.175			
	35	240	"	1.165	91.2	76.7	
	55	260	"	1.15			
	P.M. 1215	280	"	1.13			
	35	300	"	1.097	92.5	76.5	
	55	320	"	1.042			
	1.05	330	"	1.007			
	.06½	331½	"	1.60	93.2	76.2	-165.7
				[illegible]			
			Charge #45				
2/3	PM 1.40	0	90	1.62	94.2	76	
	.41	1	"	1.692			
	42	2	"	1.72			
	43	3	"	1.74			
	45	5	"	1.777			
	47	7	"	1.80			
	50	10	"	1.807	97.5	76	
	55	15	"	1.805			

DATE	TIME	MIN	AMPS	VOLTS #398	TEMP #398	TEMP Idle	
2/3/09	PM 2.00	20	90	1795	1.00	76	
	.05	25	"	1.79			
	.10	30	"	179	10.2	76	
	.20	40	"	1.79	1032	76	
	.30	50	"	1.795	105	76	
	.40	60	"	1.795	1.065	76	
	.50	70	"	1.805	108	76	
	3.00	80	"	1.807	110.2	765	
	.10	90	"	1.817	11.1.2	76.5	
	.15	95	"	1.83			
	20	100	"	1.84	1.1.2	765	
	25	105	"	1.857			
	30	110	"	1.88	1.13	765	
	35	115	"	1.91			
	40	120	"	1.9.2	1.14.5	765	
	45	125	"	1.93			
	50	130	"	1.937	115.7	765	
	55	135	"	1.937			
	4.00	140	"	1937	117.7	76.5	-2⅓ hrs. @ 90
					(107.3)		
				Discharge #45			
-3-09	P.M. 4.03	—	open	1.57			
	.05	0	20	1.492	1.17	7.65	
	07	2	"	1.425			
	10	5	"	1.405			

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle	
2-3-09	P.M. 4.15	10	30	1.385	114.7		
	.25	20	"	1.355			
	.35	30	"	1.332			
	.45	40	"	1.315	110		
	5.05	60	"	1.285	1075	76.2	
	.25	80	"	1.265			
	.45	100	"	1.245			
	6.05	120	"	1.235	102.2	762	
	.25	140	"	1.217			
	.45	160	"	1.205			
	7.05	180	"	1.197	98	76	
	.25	200	"	1.183			
	.45	220	"	1.172			
	8.05	240	"	1.155	96	76.2	
	.25	260	"	1.135			
	.45	280	"	1.10			
	9.05	300	"	1.042	96.5	76.2	
	.15	310	"	1.002			
	.16	3.11	"	1.00			−155.5

Charge #46

DATE	TIME	MIN.	AMP	VOLTS TO NiO2 #398	VOLTS TO NiO2 Fe	VOLTS TO NiO2 Ni.	TEMP 398	TEMP Idle	
2-3-09	P.M. 9.30	0	90	1.54	1.45	.11	99	22.8 76.2	
	.31	1	"	1.63	1.47	.155		Electrode #5	
	.32	2	"	167	1.487	.18			
	.33	3	"	.171	1.507	.192			
	.35	5	"	1.737	1.525	.197			
	.37	7	"	1.76	164	.205			
	.40	10	"	1.78	1.56	.215	101.2	25.0 76.2	
	.45	15	"	.1787	156	.22			
	.50	20	"	1792	1545	.225	103	26.8 76.2	
	.55	25	"	178	1537	.232			
	10.00	30	"	1777	1525	.237	104.7	28.7 76	
	.10	40	"	1785	1522	.247	1062	30.2 76	
	.20	50	"	1785	1.52	.257	107.5	31.3 76.2	
	.30	60	"	179	1.522	.26	108.5	32.5 76.2	
	.40	70	"	1777	1.522	.26	109	32.8 76.2	
	.50	80	"	1802	1535	.262	110	33.8 76.2	Temp diff 34.8
	11.00	90	"	182	1545	.262	111	762	
	.05	95	"	184	1.56	.265		36.5	
	.10	100	"	186	1.58	.265	112.7	762	
	.15	105	"	1982	1605	.27		38	
	.20	110	"	190	1.62	.272	1.14	76	
	.25	115	"	192	1.637	.277		40.3	
	.30	120	"	192	1.64	.275	1.16	757	
	.35	125	"	1925	1.645	.272		42.7	
	.40	130	"	1925	1645	.272	1.18	753	
	.45	135	"	1.925	1645	.27		41.3	
	1.20	140	"	1.925	1.645	.27	119.5	75.2	−2⅓ @ 90
				?	ae.	ae.	(109.3)	ae.	

90 Sp. = 60 m
1 " = 2/3 "

1 m = 1½ Sp
2 " = 3 "
5 " = 7½ "
10 " = 15 "

DATE	TIME	MIN.	AMP	VOLTS	TEMP		
				398	398	Idle	
			Discharge			46	
2-3-09	P.M. 11.53	–	open	155.5			
	.55	0	30	149.5	118,	75	
	.57	2	"	142.5			
	12.00	5	"	140.2			
	.05	10	"	138.5	117	75.2	
	.15	20	"	135.8			
	.25	30	"	133.9			
	.35	40	"	132	112.2	75.5	
	.55	60	"	129	109.9	75.2	
	1.15	80	"	127			
	.35	100	"	125			
	.55	120	"	123.7	103	74.5	
	2.15	140	"	122.2			
	.35	160	"	121			
	.55	180	"	120	99.2	74.7	
	3.15	200	"	119			
	.35	220	"	117.7			
	.55	240	"	115.7	97	75	
	4.10	260	"	113.9			
	.35	280	"	110.2			
	.55	300	"	105	96	75	
	5.05	310	"	101			
	.08	313	"	100	96	75	–156.5

DATE	TIME	MIN	AMPS	VOLTS	TEMPS	
				398	398	Idle
2/4/09			Charge			47
	AM 5.25	0	30	137	97	75.2
	.27	2	"	141		
	.30	5	"	144.2		
	.35	10	"	149		
	.45	20	"	155		
	.55	30	"	160		
	6.05	40	"	163		
	.25	6.0	"	165	94	75.5
	.45	8.0	"	165		
	7.05	400	"	165		
	.25	120	"	165	90	75
	.45	140	"	165		
	8.05	160	"	166		
	.25	180	"	166.2	89	75.5
	.45	200	"	167		
	9.05	220	"	166		
	.25	240	"	169	87.7	75
	.45	260	"	1.70		
	10.05	280	"	1.725		
	.25	300	"	1.73	87.	745
	.46	320	"	1.742		
	11.05	340	"	1.777		
	.25	360	"	1.827	88.5	745
	.45	380	"	1.84		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
2/4/09	PM 12.05	400	30	1.84		
	25	420	"	1.84	905 (904)	742

Discharge #47

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
2/4	PM 1228	—	open	1.59		
	1230	0	.30	1.492		
	32	2	"	1.417		
	35	5	"	1.377		
	40	10	"	1.362		
	50	20	"	1.332		
	1.00	30	"	1.32		
	.13	43	"	1.306		
	.30	60	"	1.285	90.5	74.5
	.50	80	"	1.265		
	2.10	100	"	1.245		
	.30	120	"	1.227	90	74
	.50	140	"	1.225		
	3.10	160	"	1.215		
	.30	180	"	1.207	90	74
	.50	200	"	1.198		
	4.10	220	"	1.189		
	.30	240	"	1.18	90	74
	.50	260	"	1.165		
	5.10	280	"	1.155		
	.30	300	"	1.137	91.7	74.5

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle	
2/4/09	PM 5.50	320	30	1.105			
	6.10	340	"	1.063			
	.20	360	"	1.04			
	.26	356	"	1.00	95	75	−178

Charge #48

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle
2-4-09	P.M. 7.55	0	30	140	89	76.2
	.57	2	"	146		
	8.00	5	"	1.497		
	.05	10	"	1.54		
	.15	20	"	1.60		
	.25	30	"	1.637		
	.35	40	"	1.657		
	.55	60	"	1.667	887	75
	9.15	80	"	1.662		
	.35	100	"	1662		
	.55	120	"	1663	865	74.2
	10.15	140	"	1.667		
	.35	160	"	1.672		
	.55	180	"	1.672	85.2	74
	11.15	200	"	1.681		
	1.35	220	"	1.69		
	.55	240	"	1.698	84.5	73.2
	12.15	260	"	170.5		
	.35	280	"	172		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	Idle
2/5/09	AM 12.55	300	30	173	84.5	73.2
	1.15	320	"	174.2		
	.35	340	"	177		
	.55	360	"	180.2	85.5	73.2
	2.15	380	"	183		
	.35	400	"	184.5		
	.55	420	"	185	87.5	73
					(86.4)	
2/5			Discharge			48
	PM 2.58	—	open	159		
	3.00	0	30	151		
	.02	2	"	142.5		
	.05	5	"	139		
	.10	10	"	137		
	.20	20	"	134		
	.30	30	"	132.2		
	.40	40	"	131		
	4.00	60	"	128.2	89	74.5
	.20	80	"	127		
	.40	100	"	125		
	5.00	120	"	124	89	74
	.20	140	"	123		
	.40	160	"	122		
	6.00	180	"	121	88.5	74
	.20	200	"	120		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	Idle	
2/5/09	PM 6.40	220	30	119			
	7.00	240	"	118	88.5	73	
	.20	260	"	117			
	.40	280	"	116			
	8.00	300	"	114	91	74	
	.20	320	"	1.12			
	.40	340	"	108.7			
	.50	350	"	106			
	9.00	360	"	1.03			
	07	367	"	1.00	92.7	73.5	-183.5

				398	Fe #	Ni	TEMP 398	Idle	
	AM		Charge		49				
2/5	9.30	0	30	1.40	1.385	-.012	9.1	7.35	Electrode #5
	.32	2	"	1.45	1.405	.012			
	.35	5	"	1.477	1.432	.035			
	.40	10	"	1.517	1.45	.057			
	.50	20	"	1.57	1.479	.081			
	10.00	30	"	1.609	1.49	.101			
	.10	40	"	1.64	1.51	.107			
	.30	60	"	1.655	1.517	.127	897	7.4	
	.50	80	"	1.65	1.505	.132			
	11.10	100	"	1.65	1.498	.14			
	.30	120	"	1.652	1.491	.15	897	75.5	
	.50	140	"	1.657	1.49	.157			

DATE	TIME	MIN	AMPS	VOLTS	VOLTS TO NiO_2		TEMP	
				398	Fe	Ni	398	Idle
	PM							
2/5/09	12.10	160	30	1.657	1.49	.162		
	.30	180	"	1.662	1.485	.17	89	7.57
	.50	200	"	1.67	1.485	.178		
	1.10	220	"	1.678	1.482	.183		
	.30	240	"	1682	1482	.195	88.5	75.2
	.60	260	"	1.698	1.487	.20		
	2.10	280	"	1.707	1.49	.21		
	.30	300	"	1.721	1.497	.219	88.	75.5
	50	320	"	1.732	1.50	.223		
	3.10	340	"	1.75	1.51	.23		
	.30	360	"	1.777	1.53	.237	88.5	75
	50	380	"	1.81	1.56	.24		
	4.10	400	"	1.83	1.583	.227	89.4	
	.30	420	"	1.84	1.598	.238	91	75
				Discharge #			49	
	PM							
2-5-09	4.33	—	open	1.58	1.405	.165		
	.35	0	30	1.505	1.387	.105		
	.37	2	"	1.432	1.345	.08		
	.40	5	"	1.38	1.305	.067		
	.45	10	"	1.365	1.30	.057		
	.55	20	"	1.34	1.296	.042		
	5.05	30	"	1.322	1.295	.021		
	.15	40	"	1.307	1.292	.013		
	.35	60	"	1.287	1.29	-.012	92	757
	.55	80	"	1.27	1.29	-.03		

DATE	TIME	MIN.	AMP	VOLTS TO NiO_2			TEMP.		
				398	Fe	Ni.	398	Idle	
	P.M.								
2-5-09	6.15	100	30	1.25	1.292	-.045			
	.35	120	"	1.24	1.291	-.057	927	762	
	.55	140	"	1.227	1.289	-.065			
	7.15	160	"	1.217	1.283	-.072			
	.35	180	"	1.207	1.277	-.083	92.5	76.7	
	.55	200	"	1.20	1.292	-.095			
	8.15	220	"	1.192	1.286	-.10			
	.35	240	"	1.18	1.285	-.113	93	77	
	.55	260	"	1.173	1.285	-.12			
	9.15	280	"	1.16	1.294	-.135			
	.35	300	"	1.14	1.283	-.15	94.5	77.5	
	.55	320	"	1.119	1.283	-.173			
	10.15	340	"	1.083	1.282	-.202			
	.35	360	"	1.03	1.28	-.257	95	77	
	.42	367	"	1.00	1.28	-.287	95	767	-183.5
				Charge # 50					
	PM								
2-5-09	10.45	0	20	1.34	95	76.5			
	.47	2	"	1.41					
	.50	5	"	1.437					
	.55	10	"	1.49					
	11.05	20	"	1.56					
	.15	30	"	1.59					
	.25	40	"	1.62					

DATE	TIME	MIN	AMPS	VOLTS	TEMPS	
				398	398	Solle
2/5/09	AM 11.45	60	30	165	94.5	75
2/6	AM 12.05	80	"	165		
	.25	100	"	165		
	.45	120	"	165	90.2	74.7
	1.05	140	"	165.5		
	.25	160	"	166		
	.45	180	"	166.2	89	75
	2.05	200	"	167		
	.25	220	"	167		
	.45	240	"	168	89	75.5
	3.05	260	"	169		
	.25	280	"	170		
	.45	300	"	171.5	87.7	75
	4.05	320	"	173		
	.25	340	"	174.5		
	.45	360	"	177	87	74.5
	5.05	380	"	181		
	.25	400	"	183		
	.45	420	"	184	89	75
					90.2	
			Discharge			#50
2/6	AM 5.48	–	Open	159		
	.50	0		150		
	.52	2		142		
	.55	5		138.5		

DATE	TIME	MIN	AMPS	VOLTS	TEMPS		
				398	398	Solle	
2/6/09	AM 6.00	10	30	136.5			
	.10	20	"	134			
	.20	30	"	132			
	.30	40	"	131			
	.50	60	"	128	89	74.5	
	7.10	80	"	126.2			
	.30	100	"	125			
	.50	120	"	123.5	87	73.2	
	8.10	140	"	1,226			
	.30	160	"	1,215			
	.50	180	"	1,205	86	73	
	9.10	200	"	1,197			
	.30	220	"	1,185			
	.50	240	"	1,177	88	73.2	
	10.10	260	"	1,167			
	.30	280	"	1,152			
	.50	300	"	1,133	88.2	73.5	
	11.10	320	"	1,112			
	.30	340	"	1,08			
	.40	350	"	1,05			
	.50	360	"	1,02	90.2	73.7	
	.54½	364½	"	1,00			–182.2

Stood 35 Hours over Sunday H.J.

DATE	TIME	MIN	AMP	VOLTS	TEMP	
				398	398	Idle
2/7/39		Charge #51				
	pm 11.15	0	30	151	70.2	70
	.17	2	"	158		
	.20	5	"	165.5		
	.25	10	"	165		
	.35	20	"	168.5		
	.45	30	"	170.6		
	.55	40	"	170.9	74.2	70.7
	12.15	60	"	169.4		
	.35	80	"	168.1	77	71
	.55	100	"	168.1		
	1.15	120	"	168	78.5	71
	.35	140	"	168.3		
	.55	160	"	169	80	71.2
	2.15	180	"	169		
	.35	200	"	169.8	81.5	72
	.55	220	"	169.9		
	3.15	240	"	170.2	83	72.2
	.35	260	"	171.2		
	.55	280	"	172.1	84	72.7
	4.15	300	"	173		
	.35	320	"	174.2	85	73
	.55	340	"	176		
	5.15	360	"	178	86	73
	.35	380	"	180.6		

DATE	TIME	MIN	AMP	VOLTS	TEMP	
				398	398	Idle
2/8/39	AM 5.55	400	30	182.7	87	73.2
	6.15	420	"	184		
	.35	440	"	184.2	89	73.5
	.55	460	"	184.7		
	7.15	480	"	185	90.2	73.5
	.35	500	"	185		
	.55	520	"	185	91.5	74
	8.15	540	"	185		
	35	560	"	1.85	91.7	74
	55	580	"	1.85		
	9.15	600	"	1.85	92.2	74
	.35	620	"	1.85		
	.55	640	"	1.85	92.6	74
	10.15	660	"	1.85		
	.35	680	"	1.85	93.2	74
	.55	700	"	1.85		
	11.15	720	"	1.85	93.7	74
	.35	740	"	1.85		
	55	760	"	1.85	94.5	74.2
	12.15	780	"	1.85		
	35	800	"	1.85	94.7	74.5
	.55	820	"	1.85		
	1.15	840	"	1.842	95.5	75
	.35	860	"	1.842		
	.55	880	"	1.84	96.5	75

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	TEMPS Idle
2-8-09	P.M. 2.15	900	20	1.84	96.5	75.2
					(87.1)	

Discharge # 51

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	TEMPS Idle
2-8-09	P.M. 2.18	–	open	1.595		
	.20	10	20	1.52		
	.22	2	"	1.425		
	.25	5	"	1.40		
	.30	10	"	1.38		
	.40	20	"	1.355		
	.50	30	"	1.337		
	3.00	40	"	1.325	93.5	75.5
	.20	60	"	1.30		
	.40	80	"	1.27		
	4.00	100	"	1.26	93.2	76.
	.20	120	"	1.25		
	.40	140	"	1.237		
	5.00	160	"	1.227	92.2	76
	.20	180	"	1.217		
	.40	200	"	1.21	91.2	76
	6.00	220	"	1.205		
	.20	240	"	1.195	92.5	76.2
	.40	260	"	1.187		
	7.00	280	"	1.18	93.5	76
	.20	300	"	1.175		
	.40	320	"	1.163	94.5	76.3

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle	
2-8-09	8.00	340	30	1.153			
	.20	360	"	1.138	96	76.5	
	.40	380	"	1.115			
	9.00	400	"	1.085	98	76.7	
	.20	420	"	1.052			
	.30	420	"	1.025	–		
	.40	440	"	1.00	99.5	76.5	-220

Charge # 52

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle
2-8-09	PM 9.45	0	30	1.37	997	76.5
	.47	2	"	1.42		
	.50	5	"	1.457		
	.55	10	"	1.50		
	10.05	20	"	1.552		
	.15	30	"	1.58		
	.25	40	"	1.612	100	77
	.45	60	"	1.642		
	11.05	80	"	1642	98	78
	.25	100	"	1642		
	.45	120	"	1642	96.5	78.2
2/9	AM 12.05	140	"	165		
	.25	160	"	165	94	78
	.45	180	"	1659		
	1.05	200	"	1662	92.7	78
	.25	220	"	167		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	Idle
2/9/09.	AM 1.45	240	30	167.5	91.7	78
	2.05	260	"	168.6		
	.25	280	"	169.2	90.5	77.5
	.45	300	"	170.5		
	3.05	320	"	171.5	89.2	77
	.25	340	"	172.2		
	.45	360	"	173.5	89.5	77.2
	4.05	380	"	174.1		
	.25	400	"	175	89.5	77.7
	.45	420	"	177.7		
	5.05	440	"	180	90.	77.5
	.25	460	"	182.2		
	.45	480	"	184	90.7	77
	6.05	500	"	185		
	.25	520	"	185	92	77
	.45	540	"	185.5		
	7.05	560	"	185	93.2	77.5
	.25	580	"	185		
	.45	600	"	185	94	77.7
	8.05	620	"	184.7		
	.25	640	"	184.2	94.7	77.5
	45	660	"	1.85		
	9.05	680	"	1.842	95.5	77.5
	.25	700	"	1.845		
	.45	720	"	1.84	95.7	77.5

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	Idle
2/9/09	AM 10.05	740	30	1.84		
	.25	760	"	1.84	96	775
	45	780	"	1.842		
	11.05	800	"	1.844	97	77.5
	.25	820	"	1.845		
	.45	840	"	1.842	97.7	775
	12.05	860	"	1.84		
	.25	880	"	1.84		
	.45	900	"	1.84	98.2	77.5
					(94.3)	

Discharge #52

2/9	PM 1248	—	open	1.59		
	1250	0	30	1.50		
	52	2	"	1.422		
	55	5	"	1.397		
	1.00	10	"	1.375		
	.10	20	"	1.352		
	.20	30	"	1.335		
	.30	40	"	1.32	96	78
	.50	60	"	1.293		
	2.10	80	"	1.275	95.5	78
	.30	100	"	1.257		
	.50	120	"	1.245	94.2	78.2
	3.10	140	"	1.232		
	.30	160	"	1.222	93.2	78.2

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle	
2/9/09	PM 3.50	180	30	1.217			
	4.10	200	"	1.205	93	78.2	
	.30	220	"	1.20			
	.50	240	"	1.193	93	78.2	
	5.10	260	"	1.185			
	.30	280	"	1.177	93	78.2	
	.50	300	"	1.162			
	6.10	320	"	1.155	93.2	78.2	
	.30	340	"	1.14			
	.50	360	"	1.125	94.5	78	
	7.10	380	"	1.102			
	.30	400	"	1.08	94.7	78	
	.40	410	"	1.05			
	.50	420	"	1.03			
	8.00	430	"	1.00	96	78	-215
				Charge 53.			-H2O put in.
2-9-09	P.M. 8.20	0	30	1.36	(96)	78	
	.22	2	"	1.44	94		
	.25	5	"	1.46			
	.30	10	"	1.505			
	.40	20	"	1.555			
	.50	30	"	1.597			
	9.00	40	"	1.627	94	78	
	.20	60	"	1.65			

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle
2-9-09	P.M. 9.40	80	30	1.652	94	78
	10.00	100	"	1645		
	.20	120	"	165	93.5	78
	.40	140	"	1.652		
	11.00	160	"	1.655	92.5	78
	.20	180	"	166		
	.40	200	"	166.5	91.5	79
2/.	AM 12.00	220	"	167		
	.20	240	"	167	91	79.2
	.40	260	"	168		
	1.00	280	"	169	90.5	79.2
	.20	300	"	170		
	.40	320	"	171	90.5	79
	2.00	340	"	172		
	.20	360	"	173	90.2	79
	.40	380	"	174.2		
	3.00	400	"	176	90.7	79
	.20	420	"	178.2		
	.40	440	"	181	91.5	78.5
	4.00	460	"	182.2		
	.20	480	"	184	92.5	78.2
	.40	500	"	185		
	5.00	520	"	184.5	93.5	78
	.20	540	"	185		
	.40	560	"	184.5	94.2	78

DATE	TIME	MIN	AMP	VOLTS	TEMP		
				398	398	Idle	
2/10/09	AM 6.00	580	30	185			
	.20	600	"	185	95	78	
	.40	620	"	185			
	7.00	640	"	185	95.5	78	
	.20	660	"	185			
	.40	680	"	185	94.5	77	
	8.00	700	"	185			
	.20	720	"	185	94	77	
	.41	741	"	1.85			
	9.00	760	"	185	94.5	76.5	
	.20	780	"	185			
	.40	800	"	1.85	94	765	
	10.00	820	"	1.85			
	20	840	"	1.85	93.2	76	
	40	860	"	1.852			
	11.00	880	"	1.855	92	75	
	20	900	"	1.857	917 (92.8)	74.5	-15 hrs.

Discharge # 53

	AM					
2/10	11.23	—	open	1.60		
	11.25	0	30	1.502		
	.27	2	"	1.43		
	.30	5	"	1.395		
	.35	10	"	1.377		
	.45	20	"	1.357		

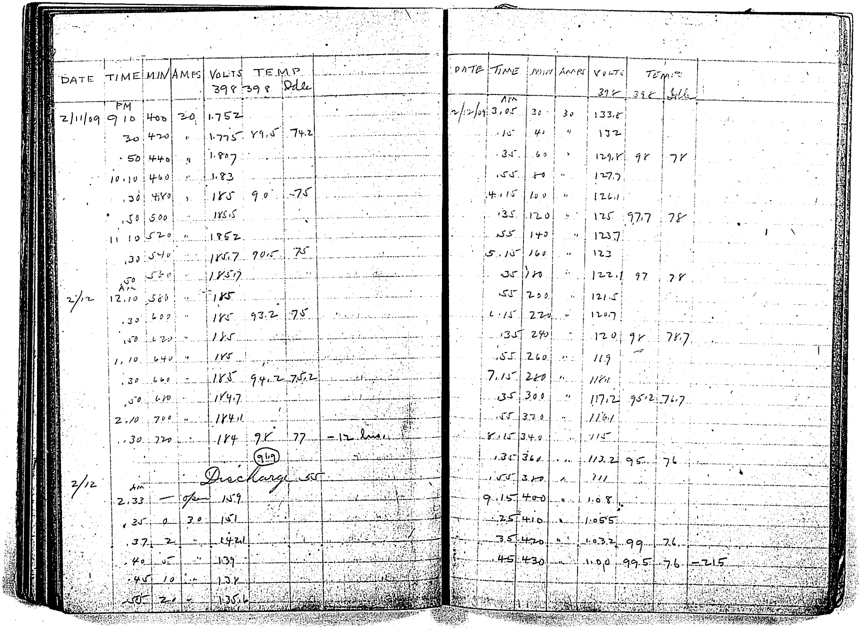
DATE	TIME	MIN	AMPS	VOLTS	TEMP		
				398	398	Idle	
2/10/09	AM 11.55	30	30	1.337			
	1205	40	"	1.317			
	.25	60	"	1.297	91.5	73	
	.45	80	"	1.277	91.2	73	
	1.05	100	"	1.267			
	.25	120	"	1.243	90.6	73	
	.45	140	"	1.232			
	2.05	160	"	1.222	90.5	73	
	.25	180	"	1.217			
	.46	201	"	1.207	90.5	73.2	
	3.05	220	"	1.20			
	.25	240	"	1.195	90.5	73.5	
	.45	260	"	1.186			
	4.05	280	"	1.178	91.2	73.7	
	.25	300	"	1.167			
	.45	320	"	1.157	92.2	74	
	5.05	340	"	1.143			
	.25	360	"	1.125	93.2	74	
	.45	380	"	1.107			
	6.05	400	"	1.08	94	74	
	.15	410	"	1.062			
	.25	420	"	1.035			
	.35	430	"	1.007			
	.38	433	"	1.00	94.7	74	= 216.5

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP oldle
			Charge #54			
	P.M.					
2-10-09	6.45	0	30	1.36	95	74
	.47	2	"	1.42		
	.50	5	"	1.457		
	.55	10	"	1.495		
	7.05	20	"	1.552		
	.15	30	"	1.59		
	.25	40	"	1.615		
	.45	60	"	1.645	93	73.5
	8.05	80	"	1.652		
	.25	100	"	1.652		
	.45	120	"	1.655	90.5	73.2
	9.05	140	"	1.657		
	.25	160	"	1.66		
	.45	180	"	1.66	89.2	73.2
	10.05	200	"	1.665		
	.25	220	"	1.673		
	.45	240	"	1.68	87	73
	11.05	260	"	1.68		
	.25	280	"	1.6.9.7		
	.45	300	"	171		
2/11	A.M. 12.05	320	"	172		
	.25	340	"	173		
	.45	360	"	17.4	86	73
	1.05	380	"	175		

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP. #398	TEMP. oldle	
2/11/09	A.M. 1.25	400	30	177			
	.45	420	"	179			
	2.05	440	"	182			
	.25	460	"	184.			
	.45	480	"	185	90.5	74	
	3.05	500	"	185			
	.25	520	"	185			
	.45	540	"	185			
	4.05	560	"	185			
	.25	580	"	185.8			
	.45	600	"	185.9	91.2	73.5	
	5.05	620	"	185.8			
	.25	640	"	185.5			
	.45	660	"	185	94	74	
	6.05	680	"	185			
	.25	700	"	185			
	.45	720	"	185.5	93.2 (90.5)	73.5	– 12 hrs.
2/11				Discharge #54			
	A.M. 6.48	–	open	159.7			
	.50	0	30	152			
	.52	2	"	143			
	.55	5	"	139.7			
	7.00	10	"	137.8			
	.10	20	"	135			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	 Idle	
2/11/09	AM 7.20	30	30	133.2			
	.30	40	"	132			
	.50	60	"	129.7	91.2	72	
	8.10	80	"	127.2			
	.30	100	"	1.26			
	.50	120	"	1.243	89.7	72.7	
	9.10	140	"	1.232			
	.30	160	"	1.222			
	.50	180	"	1.217	89.2	73	
	10.10	200	"	1.207			
	.30	220	"	1.20			
	.50	240	"	1.193	88.5	73	
	11.10	260	"	1.185			
	.30	280	"	1.175			
	.50	300	"	1.165	88.3	73	
	PM 12.10	320	"	1.153			
	.30	340	"	114			
	.50	360	"	1.12	91	72.5	
	1.10	380	"	1.10			
	.30	400	"	1.072			
	.50	420	"	1.03	937	72.5	
	2.00	430	"	1.00			-215
	.10	440	"	.957			-220

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	 Idle
		Charge #			55	
2/11/09	PM 2.30	0	30	1.38	96.3	72.2
	.32	2	"	1.437		
	.35	5	"	1.465		
	.40	10	"	1.50		
	.50	20	"	1.555		
	3.00	30	"	1.595		
	.10	40	"	1.62		
	.30	60	"	1.652		
	.50	80	"	1.655	92.5	73.5
	4.10	100	"	1.652		
	.30	120	"	1.655	89.5	73
	.50	140	"	1.657		
	5.10	160	"	1.66		
	.30	180	"	1.662	8.8	73.2
	.50	200	"	1.667		
	6.10	220	"	1.672		
	.30	240	"	1.677	87.5	73.2
	.50	260	"	1.682		
	7.10	280	"	1.69		
	.30	300	"	1.70	88	73
	.50	320	"	1.72		
	8.10	340	"	1.73		
	.30	360	"	1.735	8.9	73.5
	.50	380	"	1.74		



DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	 Idle	
2/11/09	PM 9 10	400	30	1.752			
	30	420	"	1.775	89.5	74.2	
	.50	440	"	1.807			
	10.10	460	"	1.83			
	.30	480	"	185	90	75	
	.50	500	"	185.5			
	11 10	520	"	185.2			
	.30	540	"	185.7	90.5	75	
	.50	560	"	185.7			
2/12	AM 12.10	580	"	185			
	.30	600	"	185	93.2	75	
	.50	620	"	185			
	1.10	640	"	185			
	.30	660	"	185	94.2	75.2	
	.50	680	"	184.7			
	2.10	700	"	184.1			
	.30	720	"	184	98	77	-12 hrs.
					(91.9)		
2/12				Discharge 55			
	AM 2.33	—	open	159			
	.35	0	30	151			
	.37	2	"	142.1			
	.40	5	"	139			
	.45	10	"	138			
	.55	20	"	135.6			

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	 Idle	
2/12/09	AM 3.05	30	30	133.8			
	.15	40	"	132			
	.35	60	"	129.8	98	78	
	.55	80	"	127.7			
	4.15	100	"	126.1			
	.35	120	"	125	97.7	78	
	.55	140	"	123.7			
	5.15	160	"	123			
	.35	180	"	122.1	97	78	
	.55	200	"	121.5			
	6.15	220	"	120.7			
	.35	240	"	120	98	78.7	
	.55	260	"	119			
	7.15	280	"	118.1			
	.35	300	"	117.2	95.2	76.7	
	.55	320	"	116.1			
	8.15	340	"	115			
	.35	360	"	113.2	95	76	
	.55	380	"	111			
	9.15	400	"	1.08			
	.25	410	"	1.055			
	.35	420	"	1.032	99	76	
	.45	430	"	1.00	99.5	76	-215

DATE	TIME	MIN.	AMPS	VOLTS	TEMP. 398	TEMP. Idle
		Charge #56				
	AM					
2/12/09	1030	0	30	1.405	97	77
	32	2	"	1.457		
	35	5	"	1.48		
	40	10	"	1.517		
	50	20	"	1.565		
	11.00	30	"	1.59		
	.10	40	"	1.63		
	.30	60	"	1.657	94.7	76.5
	.50	80	"	1.65		
	12.10	100	"	1.65		
	.30	120	"	1.647	92.2	76.2
	.50	140	"	1.647		
	1.10	160	"	1.652		
	.30	180	"	1.66	91.2	76.5
	.50	200	"	1.665		
	2.10	220	"	1.67		
	.30	240	"	1.677	89.2	76
	.50	260	"	1.68		
	3.10	280	"	1.695		
	.30	300	"	1.70	89.5	76
	.50	320	"	1.71		
	4.10	340	"	1.722		
	.30	360	"	1.732	87.7	75
	.50	380	"	1.757		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
	PM						
2/12/09	5.10	400	30	1.77			
	.30	420	"	1.797	88.5	74.5	
	50	440	"	1.82			
	6.10	460	"	1.84			
	.30	480	"	1.845	91.5	74.2	
	.50	500	"	1.847			
	7.10	520	"	1.845			
	.30	540	"	1.842	90.5	74.7	
	.50	560	"	1.845			
	8.10	580	"	1.842			
	.30	600	"	1.842	92.5	75.7	
	.50	620	"	1.84			
	9.10	640	"	1.84			
	.30	660	"	1.84	98	76.2	
	.50	680	"	1.84			
	10.10	700	"	1.84			
	.30	720	"	1.84	99.2	77.5	-12 hrs @ 30
					(92.7)		
2/12		Discharge					#62
	PM						
	10.33	— open —		1.597			
	.35	0	30	1.505			
	.37	2	"	1.43			
	.40	5	"	1.39			
	.45	10	"	1.381			
	.55	20	"	1.361			

DATE	TIME	MIN.	AMP	VOLTS	TEMP		
				398	398	Idle	
2/12/09	PM 11.05	30	30	135.1			
	.15	40	"	133.7			
	.35	60	"	131	97.2	76.5	
	.55	80	"	129			
2/13	AM 12.15	100	"	127			
	.35	120	"	125.2	95	76.5	
	.55	140	"	124			
	1.15	160	"	123			
	.35	180	"	122.2	94	76.2	
	.55	200	"	121.7			
	2.15	220	"	121			
	.35	240	"	120	93	75	
	.55	260	"	119			
	3.15	280	"	118.2			
	.35	300	"	117.7	92.5	74.5	
	.55	320	"	116.2			
	4.15	340	"	115			
	.35	360	"	113.8	93.7	74	
	.55	380	"	111.6			
	5.15	400	"	109			
	.25	410	"	107.7			
	.35	420	"	105	93	72.2	
	.45	430	"	102.2			
	.54½	439½	"	100	92	72	-219.7

DATE	TIME	MIN	AMP	VOLT	TEMP	
				398	398	Idle
	Stood 47 hours over Sunday.					
2/15/09	6 AM		Charge	+	57	
	5.00	0	30	150	75	75.7
	.02	2	"	157		
	.05	5	"	160		
	.10	10	"	163		
	.20	20	"	167		
	.30	30	"	169.1		
	.40	40	"	170.1		
	6.00	60	"	169	79.2	75.7
	.20	80	"	168.6		
	.40	100	"	168.1		
	7.00	120	"	168	82	72
	.20	140	"	168.1		
	.40	160	"	168.5		
	8.00	180	"	169	83.2	75.7
	.20	200	"	169		
	.40	220	"	1.697		
	9.00	240	"	1.70	83.2	75
	.20	260	"	1.71		
	.40	280	"	1.717		
	10.00	300	"	1.722	83.7	74.5
	.20	320	"	1.73		
	.40	340	"	1.737		

DATE	TIME	MIN	AMPS	VOLTS	TEMP.		
				398	398	Idle	
2/15/09	A.M. 11.00	360	30	1.75	84.2	74.5	
	.20	380	"	1.76.			
	.40	400	"	1.772			
	P.M. 1200	420	"	1.795	87	74.5	
	.20	440	"	1.815			
	.40	460	"	1.837			
	1.00	480	"	1.85	90	75	
	.20	500	"	1.852			
	.40	520	"	1.86			
	2.00	540	"	1.86	91	75	
	.20	560	"	1.85			
	.40	580	"	1.855			
	3.00	600	"	1.855	92.5	75	-10 hrs.
					(84.6)		

Discharge #57

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP. 398	Idle
2-15-09	P.M. 3.03	—	open	1.595		
	.05	0	30	1.52		
	.07	2	"	1.42		
	.10	5	"	1.397		
	.15	10	"	1.377		
	.25	20	"	1.357		
	.35	30	"	1.337		
	.45	40	"	1.322		
	4.05	60	"	1.295	92.7	75
	.25	80	"	1.275		

DATE	TIME	MIN.	AMP	VOLTS	TEMP		
				398	398	Idle	
2/15/09	P.M. 4.45	100	30	1.265			
	5.05	120	"	1.25	92	75.5	
	.25	140	"	1.237			
	.45	160	"	1.225			
	6.05	180	"	1.22	92	75	
	.25	200	"	1.213			
	.45	220	"	1.207			
	7.05	240	"	1.20	93	76	
	.25	260	"	1.195			
	.45	280	"	1.187			
	8.05	300	"	1.177	93	76	
	.25	320	"	1.163			
	.45	340	"	1.147			
	9.05	360	"	1.133	95.5	76.2	
	.25	380	"	1.112			
	.45	400	"	1.067			
	10.05	420	"	1.02	97.7	76.2	
	.10	425	"	100	98		-212.5.

DATE	TIME	MIN.	AMP.	VOLTS #398	TEMP. #398	TEMP. Idle
				Charge #		58
2-15-09	PM. 10.15	0	30	1.36	98	76.2
	.17	2	"	1.42		
	.20	5	"	1.46		
	.25	10	"	1.495		
	.35	20	"	1.542		
	.45	30	"	1.58		
	.55	40	"	161.2		
	11.15	60	"	164.6	98	76.5
	.25	80	"	165		
	.55	100	"	165		
2/16	AM 12.15	120	"	165	94	76
	.35	140	"	165.7		
	.55	160	"	165.8		
	1.15	180	"	166	91.7	75.5
	.35	200	"	166.2		
	.55	220	"	167		
	2.15	240	"	167.5	91.5	76.2
	.35	260	"	168		
	.55	280	"	169		
	3.15	300	"	169.8	91	77
	.35	320	"	170.9		
	.55	340	"	171.8		
	4.15	360	"	172.5	90.5	77.2
	.35	380	"	173.3		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	TEMPS Idle	
2/16/09	AM 4.55	400	30	174.8			
	5.15	420	"	176.5	92	77	
	.35	440	"	179			
	.55	460	"	181.8			
	6.15	480	"	184.1	91.5	76.5	
	.35	500	"	184.9			
	.55	520	"	185.1			
	7.15	540	"	185	92.5	75	
	.35	560	"	185			
	.55	580	"	185			
	8.15	600	"	185	94	75.5	-10 hrs.
					(93.1)		
				Discharge			# 58
2/16	AM 8.18	—	open	159			
	.20	0	30	151			
	.22	2	"	144			
	.25	5	"	139.9			
	.30	10	"	137.8			
	.40	20	"	135.7			
	.50	30	"	1.337			
	9.00	40	"	1.322			
	.20	60	"	1.295	93	75.5	
	.40	80	"	1.277			
	10.00	100	"	1.26			
	.20	120	"	1.25	91.7	75	

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle	
2/16/09	AM 1040	140	30	1.235			
	11:02	162	"	1.225			
	.20	180	"	1.22	91.	75.	
	.40	200	"	1.21			
	P.M. 12.00	220	"	1.205			
	.20	240	"	1.20	91.	75	
	.40	260	"	1.192			
	1.00	280	"	1.18			
	.20	300	"	1.167	93	75	
	.40	320	"	1.157			
	2.00	340	"	1.14			
	.20	360	"	1.12	93.7	75	
	.40	380	"	1.095			
	3.00	400	"	1.055			
	.10	410	"	1.02			
	.17	417	"	1.00	95.5	75.2	-208.5

Charge #59

DATE	TIME	MIN	AMPS	VOLTS 398	TEMP 398	TEMP Idle
2-16-09	PM 3.50	0	20	1.42	9.4	75
	.52	2	"	1.46		
	.55	5	"	1.48		
	4.00	10	"	1.515		
	.10	20	"	1.565		
	.20	30	"	1.62		

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle
2-16-09	P.M. 4.20	40	20	1.63		
	.50	60	"	1.657	93.2	75.2
	5.10	80	"	1.66		
	.30	100	"	1.657		
	.50	120	"	1.665	91.2	75
	6.10	140	"	1.657		
	.30	160	"	1.657		
	.50	180	"	1.662	90	75
	7.10	200	"	1.665		
	.30	220	"	1.675		
	.50	240	"	1.68	88.7	75.5
	8.10	260	"	1.685		
	.30	280	"	170		
	.50	300	"	1.705	88.7	76
	9.10	320	"	1.715		
	.30	340	"	1.725		
	.50	360	"	1.737	90	76.5
	10.10	380	"	1.75		
	.30	400	"	1.775		
	.50	420	"	18.02	91.5	77.5
	11.10	440	"	182.9		
	.30	460	"	184.6		
	.50	480	"	185	91.5	75.5
2/17	AM 12.10	5.00	"	185		
"	.30	5.20	"	185		

DATE	TIME	MIN	AMPS	VOLTS	TEMPS	
				398	398	Idle
2/17/09	AM 12.50	540	30.	185	92.2	74.5
	1.10	560	"	185.2		
	.30	580	"	185		
	.50	600	"	185	93.2	74.2
					(91.3)	=
			Discharge		59	
2/17	AM 1.53	–	o/c	159		
	.55	0	30	151		
	.57	2	"	143		
	2.00	5	"	139.2		
	.05	10	"	137.7		
	.15	20	"	135.1		
	.25	30	"	133.7		
	.35	40	"	131.9		
	.55	60	"	129.4	91.2	73.5
	3.15	80	"	127.4		
	.35	100	"	125.9		
	.55	120	"	124.1	90	73.2
	4.15	140	"	123.5		"
	.35	160	"	122.2		
	.55	180	"	121.8	9.1	74
	5.15	200	"	121		
	.35	220	"	120.2		
	.55	240	"	120	93	74.5
	6.15	260	"	119		

DATE	TIME	MIN	AMP	VOLTS	TEMPS		
				398	398	Idle	
2/17/09	AM 6.35	280	30	118.3			
	.55	300	"	117.1	94	74.7	
	7.15	320	"	116			
	.35	340	"	114.7			
	.55	360	"	112.7	93	74	
	8.15	380	"	110			
	.35	400	"	106.9			
	.45	410	"	104			
	.56	421	"	1.003			
	.59	423	"	1.00	91.5	72.5	– 211.5
			Charge		# 60		8hrs @ 30
4/17/09	AM 9.15	0	30	1.40	92.2	72.5	
	.17	2	"	1.45			
	.20	5	"	1.472			
	.25	10	"	1.51			
	.35	20	"	1.56			
	.45	30	"	159.7			
	.55	40	"	1.62			
	10.15	60	"	1.652	92.2	93.5	
	10.38	83	"	1.657			
	10.55	100	"	1.655			
	11.17	122	"	1.657	89.7	73	
	.35	140	"	1.66			

Date	Time	MIN	AMP 398	VOLTS 398	Temp	Idle	
2/17/9	AM 11.55	160	20	166			
	P.M. 1215	180	"	1.665			
	.35	200	"	1.67			
	55	220	"	1677	88	74.5	
	1 15	240	"	1.68	87.5	74.5	
	35	260	"	1.69			
	55	280	"	169.7			
	2 15	300	"	1.707	88.2	74.5	
	.25	320	"	1.717			
	.55	340	"	1732			
	3 15	360	"	1745	86.5	74.5	
	35	380	"	1.757			
	.55	400	"	1.78			
	4.15	420	"	1.787	8.9	75.5	
	35	440	"	1832			
	55	460	"	1.847			
	5 15	480	"	1.85	89.5		-8 hrs.
					89.2		

Discharge # 60

Date	Time	MIN	AMP 398	VOLTS 398	Temp	Idle	
2/17/09	P.M. 5.18	-	open	1.59			
	20	0	30	1.50			
	22	2	"	1.437			
	25	5	"	1.392			
	30	10	"	1.372			
	40	20	"	1.347			

DATE	TIME	MIN.	AMP.	VOLTS 398	TEMP 398	Idle	
	.50	30	30	1.325			
	6.00	40	"	1.30			
	.20	60	"	1.285	90	75	
	.40	80	"	1.267			
	7.00	100	"	1.253			
	.20	120	"	1.24	91.5	75	
	.40	140	"	1.23			
	8.00	160	"	1.22			
	.20	180	"	1.213	91.7	75	
	.40	200	"	1.205			
	9.00	220	"	1.20			
	.20	240	"	1.195	93	74.7	
	.40	260	"	1.185			
	10.00	280	"	1.177			
	.20	300	"	1.163	93.7	74.5	
	.40	320	"	1.147			
	11.00	340	"	1.13			
	.20	360	"	110.9	95.2	74.5	
	.40	380	"	106.3			
	.50	390	"	104.4			
2/18	AM 12.00	400	"	101.9			
	.03	403	"	100	96.2	74	-201.5

DATE	TIME	MIN	AMP	VOLTS	TEMP.	
				398	398	Idle
2/18/09			Charge			61
	AM 12.20	0	30	138	92	74
	.22	2	″	144.2		
	.25	5	″	146.1		
	.30	10	″	149.8		
	.40	20	″	155		
	.50	30	″	159		
	1.00	40	″	162		
	.20	60	″	165	94	74
	.40	80	″	165.1		
	2.00	100	″	165		
	.20	120	″	165	92	74
	.40	140	″	165.4		
	3.00	160	″	165.9		
	.20	180	″	166.2	89	73.5
	.40	200	″	166.8		
	4.00	220	″	167.2		
	.20	240	″	168	88	73.2
	.40	260	″	169		
	5.00	280	″	169.9		
	.20	300	″	170.9	87.5	73.2
	.40	320	″	171.5		
	6.00	340	″	172.3		
	.20	360	″	174	87.7	73.2
	.40	380	″	175.5		

DATE	TIME	MIN	AMPS	VOLTS	TEMP.		
				398	398	Idle	
2/18/09	AM 7.00	400	30	178.3			
	.20	420	″	181.1	88	73	
	.40	440	″	184			
	8.00	460	″	185			
	.20	480	″	185.8	89.5	72.5	−8 hrs,
					(89.7)		

Discharge #61

DATE	TIME	MIN	AMPS	VOLTS	TEMP. 398	Idle
2/19	A.M. 8.23	–	Open	159.2		
	25	0	30	151		
	.27	2	″	142.6		
	.30	5	″	139		
	.35	10	″	137		
	.45	20	″	134.6		
	.55	30	″	133		
	9.07½	42½	″	131		
	25	60	″	1.287	89.5	72.7
	45	80	″	127		
	10.15	100	″	125.2		
	25	120	″	124	89.7	73
	45	140	″	123		
	11.05	160	″	122		
	25	180	″	1.215	90.2	73.2
	45	200	″	1205		
	P.M. 12.05	220	″	120		
	12.25	240	″	119.2	91.5	73.7

DATE	TIME	MIN	AMP	VOLTS	TEMPS		
				398	398	Idle	
2/18/09	P.M. 12 45	260	30	1185			
	1.05	280	"	1175			
	25	200	"	1.16	93.5	74.2	
	.45	320	"	1.142			
	2.05	340	"	1125			
	25	360	"	110	95	75	
	45	380	"	106			
	50	385	"	104			
	55	390	"	1027			
	3.00	395	"	1005			
	3.03	398	"	100	95	75.5	-19.9

Charge #62

DATE	TIME	MIN	AMP	VOLTS	TEMPS		
2-19-09	P.M. 3.15	0	30	1.345	94.7	75.2	
	.17	2	"	1.425			
	.20	5	"	1.465			
	.25	10	"	1.495			
	.35	20	"	1.547			
	.45	30	"	1587			
	.55	40	"	1615			
	4.15	60	"	1645	94	75.2	
	35	80	"	1.647			
	55	100	"	1.647			
	5.15	120	"	1647	91.2	75.2	

DATE	TIME	MIN.	AMP	VOLTS	TEMP		
				398	398	Idle	
2-19-09	P.M. 5.35	140	30	165			
	55	160	"	1.655			
	6.15	180	"	1.66	89	75	
	.35	200	"	1.665			
	.55	220	"	1.67			
	7.15	240	"	1.68	89	75.2	
	.35	260	"	1.685			
	.55	280	"	1.695			
	8.15	300	"	1.705	89.5	75.5	
	.35	320	"	1.715			
	.55	340	"	1.725			
	9.15	360	"	1.74	89	75.5	
	.35	380	"	1.76			
	.55	400	"	1.79			
	10.15	420	"	1.82	90	75.7	
	.35	440	"	184			
	.55	460	"	1847			
	11.15	480	"	185	92	76	- 8 hrs.
				0	(90.9)		

Discharge #62

DATE	TIME	MIN.	AMP	VOLTS	TEMP		
2/11	pm 11.18	—	open	159			
	.20	0	30	151			
	.22	2	"	142			
	.25	5	"	1.39			
	.30	10	"	1.37.2			

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle	
2/18/09	PM 11.40	20	30	134.9			
	.50	30	"	133.1			
2/19	AM 12.00	40	"	131.6			
	.20	60	"	129	92	75	
	.40	80	"	127			
	1.00	100	"	125.4			
	.20	120	"	124.1	91.5	76	
	.40	140	"	123			
	2.00	160	"	122.1			
	.20	180	"	121.8	91	76	
	.40	200	"	121			
	3.00	220	"	120.2			
	.20	240	"	119.5	91	75	
	.40	260	"	118.5			
	4.00	280	"	117.2			
	.20	300	"	116	91	74.5	
	.40	320	"	114			
	5.00	340	"	112			
	.20	360	"	109.9	91	74	
	.40	380	"	106.2			
	.50	390	"	103.2			
	6.00	400	"	100	93	74	-200

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	TEMPS Idle	
2/19/09				Charge			63
	AM 6.20	0	30	139	92.5	73.7	
	.22	2	"	144			
	.25	5	"	147			
	.30	10	"	150.3			
	.40	20	"	155.7			
	.50	30	"	159.1			
	7.00	40	"	162.5			
	.20	60	"	165	92	74	
	.40	80	"	165.4			
	8.00	100	"	166			
	.20	120	"	165.7	89	76.2	
	40	140	"	166			
	9.00	160	"	1662			
	20	180	"	1667	87	76.2	
	40	200	"	1672			
	10.00	220	"	1677			
	10:20	240	"	1685	85.7	73.2	
	10.41	261	"	1695			
	11.00	280	"	1705			
	20	300	"	1717	85	72.7	
	40	320	"	1727			
	12.00	340	"	174			
	20	360	"	1757	84.2	72	
	40	380	"	178			

DATE	TIME	MIN	AMP	VOLTS	TEMP.		
				398	398	Idle	
2-19-09	P.M. 1.00	400	30	1.812			
	.20	420	"	1.84	85.5	72	7 hrs.
					(87.6)		
				Discharge #63			
2-19-09	P.M. 1.23	—	open	1.587			
	.25	0	30	1.502			
	.27	2	"	1.425			
	.30	5	"	1.385			
	.35	10	"	1.36			
	.45	20	"	1.337			
	.55	30	"	132			
	2.05	40	"	1.305			
	.25	60	"	128	87	72	
	45	80	"	126			
	3.05	100	"	1.245			
	.25	120	"	1237	87	725	
	45	140	"	1225			
	4.05	160	"	122			
	25	180	"	1212	88	73	
	45	200	"	1202			
	5.05	220	"	1197			
	25	240	"	1187	89.2	73	
	45	260	"	1177			
	605	280	"	1.16			
	.25	300	"	1.145	90.5	73.2	

DATE	TIME	MIN.	AMP	VOLTS	TEMP.		
				398	398	Idle	
2-19-09	P.M. 6.45	320	30	1.13			
	7.05	340	"	1.10			
	.15	350	"	1.08			
	.25	360	"	1,057	92	73.5	
	.30	365	"	1,04			
	.35	370	"	1,023			
	.40	375	"	1.005			
	.40½	375½	"	1.00	92.5	73.5	-187.7
				Charge #64			
2-19-09	P.M. 8.00	0	30	138	92.5	73.2	
	.02	2	"	1.44			
	.05	5	"	1465			
	.10	10	"	1.505			
	.20	20	"	1.565			
	.30	30	"	1.597			
	.40	40	"	1.62			
	9.00	60	"	1.653	90.7	73	
	.20	80	"	1.655			
	.40	100	"	1.655			
	10.00	120	"	1.66	89.2	72.7	
	.20	140	"	1.66			
	.40	160	"	1.662			
	11.00	180	"	1.665	89	72.5	

DATE	TIME	MIN.	AHP	VOLTS 398	TEMP 398	TEMP Idle	
2-19-09	P.M. 11.20	200	30	167			
	.40	220	"	169.9			
2/20	A.M. 12.00	240	"	168.6	86	72.2	
	.20	260	"	169.9			
	.40	280	"	170.6			
	1.00	300	"	171.8	86.5	72.5	
	.20	320	"	172.7			
	.40	340	"	174.2			
	2.00	360	"	176	86.5	72.2	
	.20	380	"	179			
	.40	400	"	182			
	3.00	420	"	183.2	88	73	-7 dis.
					(88.3)		
		Discharge					#64
2/20	A.M. 3.03	—	1/2	159			
	.05	0	30	150			
	.07	2		141.8			
	.10	5	"	137.9			
	.15	10	"	136.1			
	.25	20	"	133.8			
	.35	30	"	132			
	.45	40	"	130.5			
	4.05	60	"	128	89.2	73	
	.25	80	"	126			
	.45	100	"	125			

DATE	TIME	MIN	AMP	VOLT 398	TEMP 398	TEMP Idle	
2/20	A.M. 5.05	120	30	123.9	89.9	73.5	
	.25	140	"	123			
	.45	160	"	122.2			
	6.05	180	"	121.5	90.5	73.7	
	.25	200	"	120.5			
	.45	220	"	119.9			
	7.05	240	"	119	90	73.7	
	.25	260	"	117.8			
	.45	280	"	116.2			
	8.05	200	"	1.147	89	73.5	
	.25	320	"	1125			
	.45	340	"	1.10			
	9.05	360	"	1.055	89.2	72	
	.10	365	"	1.042			
	.15	370	"	1.027			
	.20	375	"	1.007			
	.22	377	"	1.00	90.5	71.7	-188.5
			Charge		#65		
2/20	A.M. 9.35	0	30	1.38	90.5	71.7	
	.37	2	"	1.434			
	.40	5	"	1.462			
	.45	10	"	1.50			
	.55	20	"	1.557			

DATE	TIME	MIN.	AMP	VOLTS # 398	TEMP 398	TEMP cable	
2-20-09	AM. 10.05	30	30	1.60			
	.15	40	"	1.625			
	.35	60	"	1.655	84.5	72.2	
	55	80	"	1.657			
	11.15	100	"	1.657			
	35	120	"	1.657	88	71.5	
	.55	140	"	1.657			
	P.M. 12.15	160	"	1.66			
	.35	180	"	1.662	86.5	70.2	
	.55	200	"	1.67			
	1.15	220	"	1.675			
	35	240	"	1.69	85.5	72	
	55	260	"	1.692			
	2.15	280	"	1.70			
	35	300	"	1.712	86.5	72	
	55	320	"	1.727			
	3.15	340	"	1.745			
	35	360	"	1.762	87.2	72.5	
	55	380	"	1.80			
	4.15	400	"	1.825			
	35	420	"	1.84	88.5	73.5	off 7 hrs
					(87.8)		

Stood charged 32 hours.

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP cable
		Discharge #65.				
2/22/09	AM 12.33	—	open	147.5		
	.35	0	30	138	76	75.2
	.37	2	"	131		
	.40	5	"	129		
	.45	10	"	128		
	.55	20	"	126.2		
	1.05	30	"	125.1		
	.15	40	"	124.2		
	.35	60	"	123	81.5	76
	.55	80	"	122.2		
	2.15	100	"	121.7		
	.35	120	"	121	85.7	76.5
	.55	140	"	120.2		
	3.15	160	"	120		
	.35	180	"	119	89	76.5
	.55	200	"	118.2		
	4.15	220	"	117.8		
	.35	240	"	116.5	91	76.5
	.55	260	"	115.2		
	5.15	280	"	113.9		
	.35	300	"	111.9	92.5	76
	.45	310	"	110.9		
	.55	320	"	109.3		
	6.05	330	"	117.7		

DATE	TIME	MIN	AMPS	VOLTS 398	TEMPS 398	IDLE	
2/22/39	A.M. 6.15	340	30	105			
	.25	350	"	102.3			
	.31½	355½	"	100	94.5	75.5	-178.2
2/22		Charge #66.					
	A.M. 6.40	0	30	135	94.5	75.5	
	.42	2		141.8			
	.45	5	"	145			
	.50	10	"	148.1			
	7.00	20	"	154.2			
	.10	30	"	158.2			
	.20	40	"	161.5			
	.40	60	"	164.5	94.6	75.5	/
	8.00	80	"	164.7			
	20	100	"	1647			
	40	120	"	1647	92	75.5	
	9.00	140	"	165			
	20	160	"	1652			
	40	180	"	1657	90.5	76	
	10.00	200	"	1662			
	20	220	"	167			
	40	240	"	1677	887	75	
	11.00	260	"	1687			

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	Idle	
2/22	A.M. 11.20	280	30	170			
	40	300	"	171.2	87.5	75	
	P.M. 12.00	320	"	1722			
	20	340	"	1737			
	40	360	"	1737	877 (90.8)	74.7	-6 hrs.
			Discharge #66				
2/22	P.M. 12.43	—	open	1572			
	12.45	0	30	150			
	.47	2	"	1412			
	.50	5	"	1377			
	.55	10	"	1352			
	1.05	20	"	1327			
	15	30	"	131			
	25	40	"	1295			
	45	60	"	1272	87.2	74	
	2.05	80	"	1252			
	25	100	"	1237			
	45	120	"	122.5	84.7	72	
	3.05	140	"	1215			
	25	160	"	1207			
	45	180	"	1197	85	72	
	4.05	200	"	119			
	25	220	"	1175			
	45	240	"	1162	842	71	

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle	
2/22	P.M. 5 05	260	30	1145			
	15	270	"	1137			
	25	280	"	1127			
	35	290	"	1105			
	45	300	"	1097	90	72.2	
	55	310	"	1087			
	6.05	320	"	1,065			
	.15	330	"	1,037			
	.20	335	"	1.02			
	.25	340	"	1.00	92.5	73	=170
				Charge*	67		
2-22-09	PM 6.40	0	30	1.36	89.7	73	
	.42	2	"	1.42			
	.45	5	"	1.457			
	.50	10	"	1.50			
	7.00	20	"	1.56			
	.10	30	"	1.62			
	.20	40	"	1.64			
	.40	60	"	1.65	90.7	73.2	
	8.00	80	"	1.655			
	.20	100	"	1.652			
	.40	120	"	1.65	90	73.5	
	9.00	140	"	1.677			

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP 398	TEMP Idle	
2-22-09	9.20	160	30	1.66			
	.40	180	"	1.663	90	73.5	
	10.00	200	"	1.665			
	.20	220	"	1.675			
	.40	240	"	1.685	89.5	75	
	11.00	260	"	1.70			
	.20	280	"	1.715			
	.40	300	"	172.8	88.7	75.5	
2-23-09	AM 12.00	320	"	174.2			
	.20	340	"	176.5			
	.40	360	"	178.2	89.5	75.5	off 6 hours.
2/22				Discharge	89.7		67
	AM 12.43	—	open	157.4			
	.45	0	30	148.5			
	.47	2	"	141.5			
	.50	5	"	137.7			
	.55	10	"	135.1			
	1.05	20	"	133.1			
	.15	30	"	131			
	.25	40	"	129.9			
	.45	60	"	127.5	89.7	75.5	
	2.05	80	"	125.9			
	.25	100	"	124.1			
	.45	120	"	123	89	74.7	

DATE	TIME	MIN	AMP	VOLTS	TEMPS		
				398	398	IDLE	
2/22/09	3.05	140	30	122.1			
	.25	160	″	121.4			
	.45	180	″	120.2	89	74.5	
	4.05	200	″	119.7			
	.25	220	″	118.5			
	.45	240	″	117.2	89.5	74.5	
	5.05	260	″	115.8			
	.25	280	″	113.2			
	.45	300	″	111.7	91.7	75	
	6.05	320	″	108			
	.15	330	″	105.5			
	.25	340	″	102.5			
	.32	347	″	10.0	92.2	75	-173.5
2/22			Charge # 68				
	AM 6.40	0	30	136	93	75	
	.42	2	″	142.1			
	.45	5	″	146.1			
	.50	10	″	149.5			
	7.00	20	″	155.8			
	.10	30	″	159.5			
	.20	41	″	162.1			
	.40	60	″	165	91	74	

DATE	TIME	MIN	AMP	VOLTS	TEMPS	
				398	398	IDLE
2/23/09	AM 8.00	80	30	165.4		
	20	100	″	1657		
	40	120	″	166.	86	73.5
	9.00	140	″	1664		
	20	160	″	1665		
	40	180	″	167	86.2	74
	10.00	200	″	1675		
	20	220	″	168		
	40	240	″	169	86.5	75
	11.00	260	″	1702		
	20	280	″	1717		
	40	300	″	173	87	75.2
	P.M. 12.00	320	″	1747		
	20	340	″	1777		
	40	360	″	180	875	75
					(88.2)	
			Discharge # 68			
2/23/09	P.M. 12.43	–	Open	1575		
	45	0	30	149		
	47	2	″	1412		
	50	5	″	1375		
	55	10	″	1355		
	1.05	20	″	1327		
	15	30	″	1312		
	25	40	″	1297	82.[illegible]	

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #392	TEMP Idle	
2/23	P.M. 1.45	60	30	1275	87	74.7	
	2.05	80.	"	1255			
	.25	100	"	1242			
	45	120	"	1227	87.2	73.5	
	3.05	140	"	1207			
	25	160	"	121			
	45	180	"	1202	87	74	
	4.05	200	"	1192			
	25	220	"	118			
	45	240	"	1167	89	74.5	
	5.05	260	"	1152			
	25	280	"	113			
	45	300	"	1105	90.7	74.5	
	55	310	"	1.085			
	6.05	320	"	1.06			
	.10	325	"	1.043			
	.15	330	"	1032			
	.20	335	"	1013			
	.24½	339½	"	1.00	91.5	74.2	−169.7

DATE	TIME	MIN.	AMP	VOLTS #392	TEMP #392	TEMP Idle	
			Change #69				
2-23-09	P.M. 6.40	0	30	1.36	91.5	74.2	
	.42	2	"	1.42			
	.45	5	"	1.467			
	.50	10	"	1.50			
	7.00	20	"	1.56			
	.10	30	"	1.60			
	.20	40	"	1.63			
	.40	60	"	1.65	92	75	
	8.00	80	"	1.655			
	.20	100	"	165			
	.40	120	"	1.655	90.2	75.5	
	9.00	140	"	1.655			
	.20	160	"	1.66			
	.40	180	"	1.665	89.2	75	
	10.00	200	"	1.67			
	.20	220	"	1.682			
	.40	240	"	1.692	87	74.7	
	11.00	260	"	170.2			
	.20	280	"	171.7			
	.40	300	"	172.6	87.5	75.5	off-shows
					89.4		
			Discharge				69
/23	PM 11.43	—	op	1.55.3			
	.45	0	30	1.47			

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	Idle	
2/23/59	PM 11.47	2	30	139			
	.50	5	"	136			
	.55	10	"	133.8			
2/24	AM 12.05	20	"	131.6			
	.15	30	"	129.5			
	.25	40	"	128			
	.45	60	"	126	89	76.2	
	1.05	80	"	124.2			
	.25	100	"	123			
	.45	120	"	121.9	89.7	76.7	
	2.05	140	"	121			
	.25	160	"	119.7			
	.45	180	"	118.5	90.5	77	
	3.05	200	"	117			
	.25	220	"	115.2			
	.45	240	"	113.4	91.5	77	
	4.05	260	"	110.2			
	.15	270	"	108.2			
	.25	280	"	105.9			
	.35	290	"	102.1			
	.44	299	"	100	93.5	77	−149.5

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	IDLE	
2/24/59			Charge			= 70	
	AM 5.00	0	30	137	94	77.2	
	.02	2	"	143.2			
	.05	5	"	147			
	.10	10	"	151.5			
	.20	20	"	157.9			
	.30	30	"	160.4			
	.40	40	"	163			
	6.00	60	"	164	94	77.5	
	.20	80	"	164.2			
	.40	100	"	164.5			
	7.00	120	"	165	91.5	77.5	
	.20	140	"	165.5			
	.40	160	"	166			
	8.00	180	"	166.5	90.2	78	
	.20	200	"	167.2			
	.40	220	"	168.2			
	9.00	240	"	169.5	89	77.5	
	.20	260	"	170.7			
	.40	280	"	172			
	10.00	300	"	173.5	88.5	77.5	− 5 hrs.
			Discharge		(91.2)	# 70	
2/24	A.M. 10.03	–	Open	155.5			
	.05	0	30	148			

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP Idle	
2/24.	A.M. 1.0.07	2	30	1.387			
	.10	5	"	1.36			
	.15	10	"	1.337			
	.25	20	"	1.315			
	35	30	"	1.297			
	45	40	"	1.282			
	1105	60	"	1.26	89.5	77.5	
	25	80	"	1.245			
	45	100	"	1.23			
	P.M. 12.05	120	"	1.22	89.5	77.2	
	25	140	"	1.21			
	45	160	"	1.197			
	1.05	180	"	1.183	90.5	77.2	
	.25	200	"	1.167			
	45	220	"	1.15			
	2.05	240	"	1.125	93.	72.5	
	.25	260	"	1.09			
	.35	270	"	1065			
	.40	275	"	1.047			
	.45	280	"	1.032			
	50	285	"	1.017			
	54	289	"	1.00	93.7	76.5	-144.5

DATE	TIME	MIN.	AMP	VOLTS 398	TEMP 398	TEMP Idle	
			Charge #71.				
2/24	P.M. 3.05	0	30	1.38	94.2	76.7	
	7	2	"	1.427			
	10	5	"	146			
	15	10	"	1512			
	25	20	"	1.565			
	35	30	"	1605			
	45	40	"	163			
	4.05	60	"	1642	94.5	76.2	
	25	80	"	1.645			
	45	100	"	1.645			
	5.05	120	"	1645	925	76.5	
	25	140	"	1652			
	45	160	"	1.66			
	6.05	180	"	1.665	90.2	77	
	.25	200	"	1.675			
	.45	220	"	1.685			
	7.05	240	"	1.70	88.7	76	
	.25	260	"	1.72			
	.45	280	"	1.735			
	8.05	300	"	1.762	87.5	75	-5 hours.
					(91.2)		

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle	
			Discharge #71				
2-24-09	P.M. 8,08	open	–	1.575			
	.10	0	30	1,48			
	.12	2	"	1.395			
	.15	5	"	1.36			
	.20	10	"	1.337			
	.30	20	"	1.313			
	.40	30	"	1.295			
	.50	40	"	1.282			
	9.10	60	"	1.257	85	74	
	.30	80	"	1.243			
	.50	100	"	1.23			
	10.10	120	"	1.217	83.7	73.5	
	.30	140	"	1.21			
	.50	160	"	1.197			
	11.10	180	"	118.2	86	73.5	
	.30	200	"	116.8			
	.50	220	"	114.5			
2/25	AM 12.10	240	"	112.1	87	73	
	.30	260	"	109			
	.40	270	"	106.9			
	.50	280	"	104			
	1.00	290	"	100.2			
	.01½	291½	"	100	88.5	73	-145.7

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP #398	TEMP Idle	
2/25/09	AM		Charge			#72	
	1.10	0	30	136	90	73	
	.12	2	"	143.7			
	.15	5	"	147.9			
	.20	10	"	151.9			
	.30	20	"	158.1			
	.40	30	"	161.8			
	.50	40	"	164			
	2.10	60	"	165	92	74	
	.30	80	"	164.5			
	.50	100	"	164.6			
	3.10	120	"	165	91	75	
	.30	140	"	165.5			
	.50	160	"	166.2			
	4.10	180	"	167	87	74	
	.30	200	"	168			
	.50	220	"	169			
	5.10	240	"	170	86	74	-4 hrs.
					(89.2)		
2/25			Discharge			#72	
	AM 5.13	–	open	153.2			
	.15	0	30	145			
	.17	2	"	137.6			
	.20	5	"	134.4			
	.25	10	"	102.1			

DATE	TIME	MIN	AMPS	VOLTS	TEMP		
				398	398	IDLE	
2/25/19	A.M. 5.35	20	30	129.8			
	.45	30	"	127.6			
	.55	40	"	126.5			
	6.15	60	"	1242	88	74.5	
	.35	80	"	123			
	.55	100	"	121.[illegible]			
	7.15	120	"	120	89	75	
	.35	140	"	118.1			
	.55	160	"	116.1			
	8.15	180	"	114	89.2	74.7	
	35	200	"	1107			
	55	220	"	106			
	9.15	240	"	.987	90.2	74.5	-120 to .987 V.

Charge # 73

DATE	TIME	MIN	AMPS	VOLTS	TEMP	
2/25	A.M. 925	0	30	136	91	74.2
	27	2	"	1432		
	30	5	"	147		
	35	10	"	1517		
	45	20	"	1582		
	55	30	"	162		
	1.005	40	"	164		
	25	60	"	1.645	91.2	74
	45	80	"	165		
	11.05	100	"	1.655		

DATE	TIME	MIN	AMPS	VOLTS	TEMP		
				398	398	IDLE	
2/25	A.M. 11.25	120	30	1657	887	74.7	
	45	140	"	1665			
	P.M. 12.05	160	"	167			
	25	180	"	1677	87.2	73.7	
	45	200	"	1687			
	1.05	220	"	170			
	25	240	"	1712	.86.5 (88.9)	73.7	- 4 hrs.

Discharge # 73

DATE	TIME	MIN	AMPS	VOLTS	TEMP	
2/25	P.M. 1.28	-	Open	1.537		
	30	0	30	145		
	32	2	"	1375		
	35	5	"	1342		
	40	10	"	1325		
	50	20	"	1297		
	2.00	30	"	128		
	20	50	"	1257		
	40	70	"	124	87.2	73.7
	3.10	90	"	1223		
	20	110	"	1205		
	40	130	"	1195	88	74.
	4.00	150	"	1177		
	20	170	"	1152		
	40	190	"	1122	89	74.2
	5.00	210	"	1.085		

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP Idle	
2/25	P.M. 5.10	220	30	1.057			
	15	225	"	104			
	20	230	"	1022			
	25	235	"	1002			
	26	236	"	100	90	74	-118

Charge # 74

DATE	TIME	MIN	AMP	VOLTS 398	TEMP 398	TEMP Idle	
2-25-09	P.M. 5.40	0	30	139	91	74	
	.42	2	"	145			
	.45	5	"	1475			
	.50	10	"	1525			
	6.00	20	"	1.597			
	.10	30	"	1.62			
	.20	40	"	1645			
	40	60	"	1.645	90	74	
	7.00	80	"	1.652			
	.20	100	"	1.655			
	.40	120	"	1.66			
	8.00	140	"	1.667	86.7	74.2	
	.20	160	"	1.675			
	.40	180	"	1.685	94.5	73.5	
	9.00	200	"	1.695			
	.20	220	"	1.713			
	.40	240	"	1.73	93.7 87.2	73.5	-4 lbs.

Discharge # 74

DATE	TIME	MIN.	AMP	VOLTS #398	TEMP 398	TEMP Idle	
2-25-09	P.M. 9.43	open	–	1.545			
	.45	0	30	1.46			
	.47	2	"	1.385			
	.50	5	"	1.353			
	.55	10	"	1.325			
	10.05	20	"	1.30			
	.15	30	"	1.285			
	.25	40	"	1.27			
	.45	60	"	1.252	85.5	73.2	
	11.05	80	"	123			
	.25	100	"	121.8			
	.45	120	"	120.1	86	73.2	
2/6	A.M. 12.05	140	"	118.7			
	.25	160	"	116.7			
	.45	180	"	114.4	87.7	73.5	
	1.05	200	"	111			
	.15	210	"	1096			
	.25	220	"	106.7			
	.35	230	"	103.5			
	.45	240	"	100	89.5	73.7	-120

Runs Continued in Vol. II.

A4 #398

Run	Charge	Dischg.	Chg. Temp	Ampere-Hours to 1V.	Ampere-Hours to .50V.	Remarks
	Original Electrolyte – 21% KOH + 120 g. LiOH.					
1	49 hrs.@15	At 30	—	216.5	229.2	NiO_2 Read.
	Allowed to Stand 74 Hours					
2	10 hrs.@30 reg. 9 " " cold	At 60	82.2 63.4	125	206	
3	"	"	90 63.3	130	208	
4	15 hrs.@30	At 30	90.6	187	202	NiO_2 Read
✓ 5	"	"	93.2	189	203.7	" "
6	7 hrs.@30	At 30	83.2	165.5	—	Prev. Idle 76 hrs.
X 7	"	"	92.1	172.7	—	
8	"	"	91.2	170.7	—	
9	"	"	90.7	175	—	
10	"	"	88.3	173	—	
11	"	"	88.5	177.5	—	
12	"	"	90.3	175	—	
13	"	"	89.3	178	—	
14	"	"	91.9	179	—	
15	"	"	93.4	175	—	
16	"	"	78.8	173	—	Prev. Idle 41 Hrs.
17	"	"	91	176	—	
18	"	"	88.6	176.5	—	
x 19	"	"	89.6	176.5	—	
20	15 hrs.@30	At 30	91.2	205	228.2	
21	"	"	91.7	208.5	223.5	
✓ 22	"	"	91.7	208	221.5	Orig. Temp. Read.
23	7 hrs.@30	At 30	80.8	173.7	—	Prev. Idle 53 hrs.

Run	Charge	Dischg.	Chg. Temp	Ampere-Hours to 1V.	Ampere-Hours to .5V.	Remarks
24	7 hrs.@30	At 30	91	182.5	—	
25	"	"	89.6	183.5	—	
X 26	"	"	91.7	182.7	—	
27	21 hrs.@10	"	81.6	187	—	
28	"	"	81.6	185	—	
✓ 29	"	"	81.7	186	—	(NiO_2 Read)
30	10½ hrs.@20	"	76.7	185	—	Prev. Idle 27 Hrs.
31	"	"	85.1	187	—	
✓ 32	"	"	85.5	186	—	(NiO_2 Read)
33	7 hrs.@30	"	90.2	182	—	
34	"	"	90.8	186	—	
✓X 35	"	"	88.9	182.5	—	(NiO_2 Read)
36	5¼ hrs.@40	"	97.4	182.5	—	
37	"	"	97.5	175	—	
✓ 38	"	"	95.6	176.2	—	(NiO_2 Read)
39	4⅓ hrs.@50	"	87	168.7	—	Prev. Idle 45 Hrs.
40	"	"	98.1	171	—	
✓ 41	"	"	98.3	172.5	—	(NiO_2 Read)
42	3½ hrs.@60	"	100.6	167.2	—	
43	"	"	100.7	169.2	—	
✓ 44	"	"	101.9	165.7	—	(NiO_2 Read)
45	2⅓ hrs.@90	"	107.3	155.5	—	
✓ 46	"	"	109.3	156.5	—	(NiO_2 Read)
47	7 hrs.@30	"	90.4	178	—	
48	"	"	84.4	183.5	—	

(input)

Run	Charge	Dischg	Chg. Temp	Ampere-Hours to 1V.	to .5V.	Remarks
X 49	7 hrs.@30	At 30	89.4	183.5	—	(NiO_2 Read)
50	"	"	90.2	182.2	—	
51	15 hrs.@30	At 30	87.1	220	—	Prev. Idle 35 Hrs.
52	" 450 X	"	94.3	215	—	217.2 X
✓ 53	"	"	92.8	216.5	—	
54	12 hrs.@30	"	90.5	215	—	Overdischg'd 10 min. (to .57)
55	" 360	"	91.9	215	—	216.5
56	"	"	92.7	219.7	—	
57	10 hrs.@30	"	94.6	212.5	—	Prev. Idle 47 Hrs.
58	" 300	"	93.1	208.5	—	210.8
59	"	"	91.3	211.5	—	
60	8 hrs.@ 30 240	"	89.2	201.5	—	
61	"	"	89.7	199	—	200.1
62	"	"	90.9	200	—	
63	7 hrs. @ 30 210	"	87.6	197.7	—	188.1
64	"	"	88.3	188.5	—	
65	"	"	87.8	178.2	—	Stood Charged 32 Hours
66	6 hrs.@30 180	"	90.8	170	—	
67	"	"	89.7	173.5	—	171.0
68	"	"	88.2	169.7	—	
69	5 hrs. @ 30 150	"	89.4	149.5	—	
70	"	"	91.2	144.5	—	146.5
71	"	"	91.2	145.7	—	
72	4 hrs.@30	"	89.2	120	—	To .987 V.
73	"	"	88.9	118	—	
74	4 hrs.@ 30	At 30	87.2	120	—	118.6
75	"	"	87.7	117.2	—	Record in Vol. II.
76	2 hrs.@30	"	88.1	58.5	—	
77	"	"	86.2	60	—	
78	"	"	89.6	60	—	
79	"	"	90.7	59.2	—	
80	"	"	90.1	59.7	—	